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(NASA-CR-158709) QUANTITATIVE ANALYSIS OF
DEFECTS IN SILICON: SILICON SHEET GROWTH
DEVELOPMENT FOR THE LARGE AREA SILICON SHEET
TASK OF THE LOW COST SOLAR ARRAY PROJECT
Quarterly Progress (Materials Research,

N79-25483

Unclas

G3/44 22160

Silicon Sheet Growth Development for the Large
Area Silicon Sheet Task of the Low Cost Solar Array Project

QUARTERLY PROGRESS REPORT NO. 3

by

R. Natesh
J.M. Smith
H.A. Qidwai



Covering the period 1 October 1978 to 31 December 1978

JPL Contract No. 954977

MATERIALS RESEARCH, INC.
790 East 700 South Street
Centerville, Utah 84014
Phone: (801) 531-9600

The JPL Low-Cost Silicon Solar Array Project is sponsored by the U.S. Department of Energy and forms part of the Solar Photovoltaic Conversion Program to initiate a major effort toward the development of low-cost solar arrays. This work was performed for the Jet Propulsion Laboratory, California Institute of Technology, by agreement between NASA and DOE.

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TECHNICAL CONTENT STATEMENT

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NEW TECHNOLOGY

No new technology is reportable for the period covered by this report.

C O N T E N T S

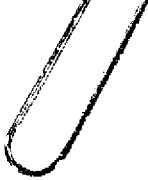
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SECTION I

S U M M A R Y

This report describes the various steps involved in the chemical polishing and etching of Mobil Tyco silicon samples and discusses the data on twins, grain boundaries and dislocation pits from forty six (46) Mobil Tyco samples and seven (7) IBM samples.

SECTION II

INTRODUCTION

The objective of this program is to evaluate and, if possible, predict conversion efficiency for a variety of silicon samples with differences in structural defects, such as grain boundaries, twin boundaries, precipitate particles, dislocations, etc. Quantitative characterization of these structural defects, which have been revealed by etching the surface of silicon samples, can then be performed by using a Quantimet 720 Image Analyzer.

The silicon samples have been obtained by JPL from different manufacturers. Each of these manufacturers use their own crystal growth and fabrication techniques and, therefore, the various types of silicon produced contain a variety of trace impurity elements and structural defects. The two most important criteria in evaluating the various silicon types for solar cell applications are: (i) cost and (ii) conversion efficiency. At present, the solar cells with highest conversion efficiency are made of high purity silicon single crystals, which are free from structural defects such as dislocations, twin boundaries, precipitate particles, etc. But these crystals are very expensive and may not meet the DOE goal of 50 cent/watt by 1986. On the other hand, silicon crystals such as EFG ribbons, Dendritic Webs, etc. are NOT single crystals; but made of highly ordered crystals which contain large numbers of dislocations, twin boundaries, grain boundaries, precipitates, etc., compared to the premium grade silicon.

The following important questions must be answered to evaluate the conversion efficiency of low cost and high cost silicon: (i) What effect do these defects have on conversion efficiency of low cost and high cost silicon? (ii) Of the various types of defects, which defect/defects severely affects conversion efficiency? (iii) At what concentrations does this effect become significant? (iv) Is there a rapid, accurate, quantitative method that can be used routinely as a Quality Assurance tool?

Quantitative analysis of surface defects is being performed by using a Quantimet 720 Quantitative Image Analyzer. This system can differentiate and count 67 shades of gray levels between black and white contrasts. In addition, it can characterize structural defects by measuring their length, perimeter, area, density, spatial distribution, frequency distribution (in any preselected direction), and so on. However, the Quantitative Image Analyzer is extremely sensitive to optical contrasts of various defects. Therefore, to obtain reproducible results, the contrasts produced by various defects must be similar and uniform for each defect types along the entire surface area of samples to be analyzed. To achieve this, a chemical cleaning and polishing technique has now been perfected for silicon samples from Mobil Tyco, Wacker, and IBM. The cleaning and polishing preparation technique produces a very clean and even surface for silicon crystals suitable for analyses by the QTM 720 Image Analyzer. We are now obtaining quantitative information from a variety of silicon crystals. Quantitative data on 53 samples are given in this report.

SECTION III

CHEMICAL POLISHING AND ETCHING OF MOBIL TYCO SAMPLES

CHEMICAL POLISHING:

In our previous Quarterly Report¹ and One-Time Report² on Crystal Cleaning and Polishing techniques, we have discussed in detail the procedures of chemical polishing and chemical etching. These techniques were perfected for Wacker and IBM samples. However, as mentioned in our Quarterly Report¹, there is a variation in polishing time for the Wacker and IBM samples. This variation is due to certain inherent manufacturing, fabrication, and processing variables, which affect the reaction rates for the two types of the samples under otherwise identical polishing conditions. Similarly, the polishing time of the silicon samples manufactured by Mobil Tyco has been observed to be different from those of IBM and Wacker samples.

The results of chemical polishing of Mobil Tyco samples are summarized in Table 1. It may be observed from the Table 1 that the polishing temperature of $50^{\circ} \pm 3^{\circ}\text{C}$ and polishing time of 40 seconds are acceptable for the Mobil Tyco samples. However, the Wacker samples require 80-85 seconds and the IBM samples require 30 seconds for polishing.

It may be noted that samples which are slightly underpolished as well as samples which are well-polished, exhibit bright and shiny surfaces when observed by the naked eye. Therefore, visual observation can not be used to determine the quality of polishing. However, when the samples are observed in a high quality optical metallograph, the underpolished samples show faceting and sub-grain type structure, whereas the well polished samples show

clearly defined grain boundaries and some of the twin boundaries in sharp contrast. Therefore, an optical metallograph must be used to determine the quality of polishing.

CHEMICAL ETCHING:

We have discussed in detail the composition and variation of the etching solution, the etching procedure, and the variation of the etching time in our previous reports^{1,3}. Etching solution III was used to distinctly reveal the structural defects such as grain boundaries, twin boundaries, and dislocation pits for IBM and Wacker samples. This etching solution contained 10 g $C_{12}O_3$ in 60 ml deionized water and 60 ml concentrated HF.

The silicon samples supplied by Mobil Tyco were also etched for 50 seconds using etching solution III. This resulted in distinct grain boundaries, twin boundaries, and dislocation pits. However, the Mobil Tyco RH samples (first batch containing the first thirty samples) contained certain impurities which reacted with the etching solution III producing a surface film over 50% of the surface area. Due to the presence of the surface film, it was not possible to analyze these samples with the QTM 720 Image Analyzer.

Twenty (20) out of thirty (30) Mobil Tyco had already been polished when the surface film problem during etching was encountered. To eliminate surface film from these twenty samples, the samples were repolished. During the repolishing process, however, the samples were preferentially dissolved at places where they contained silicon carbide particles, creating tiny holes in the samples. Out of the twenty (20) samples, only eight (8) samples could be recovered during the repolishing process. Even among these

eight (8) samples, four (4) sample surfaces had tiny holes but they were analyzed as suggested by JPL.

The remaining ten (10) as-received Mobil Tyco samples were first etched for 15 seconds, to produce the surface film. Then, these samples were polished and etched (i.e. polished for 40 seconds and then etched for 50 seconds) to remove the surface film and reveal the structural defects.

Mobil Tyco sample Nos. 19 thru 46 did not, however, react with the etching solution. Hence, they were first cleaned and polished, and then etched in the normal manner.

SECTION IV

TECHNICAL DISCUSSION

Chemical polishing and chemical etching of forty six (46) Mobil Tyco samples and seven (7) IBM samples were completed in the current reporting period. These samples were then analyzed for twin boundaries, grain boundaries, and dislocation pits.

Procedure for QTM analysis, method of selecting fields, and explanation of teletype printout are discussed below.

Measurement of Twins:

In the Mobil Tyco samples, almost all the twins are oriented parallel to one another and run from one edge of the wafer to the opposite edge (parallel to the longitudinal axis of the silicon ribbon). Therefore, in order to measure twin density, 50 fields were chosen along the central transverse axis of the sample. In other words, the central transverse axis is perpendicular to the twins. The distance between each of these 50 fields where measurements for twins were made was 0.31 mm. The long dimension of each field is 0.30 mm. Therefore, each of these fields are adjacent to one another by a distance of 0.01 mm, and therefore, do not overlap one another. It is important that the fields do not overlap, since the same twin should not be counted twice. At the same time, the fields must be close to one another so that almost all the twins are counted by the QTM. On the other hand, counting may also be done using a square raster of 50 fields distributed evenly over the entire sample surface.

In this case, the horizontal distance separating each field will be 2.5 mm, which is much larger than the long dimension of the frame i.e., 0.30 mm. Therefore, under the method of square raster, there is a possibility that areas in the sample where the twin or dislocation density is very high may not be counted. This will result in large errors. Therefore, all the 50 fields were counted along the central transverse axis of the sample.

In the IBM samples also, almost all the twins are oriented parallel to one another and run from one edge of the wafer to the opposite edge. Therefore, the above procedure was also used for measuring twins in the IBM samples. However, the Mobil Tyco samples have dimensions of 2.5 cm. by 2.5 cm., whereas the IBM samples have dimensions of 3 cm. by 3 cm. Therefore, in the case of IBM samples, 70 fields were chosen for analysis along the central transverse axis of each samples to cover the additional 0.5 cm in length.

Measurement of Dislocation Pits:

Measurements on dislocation pits from Mobil Tyco samples 1 to 9 were made on 50 equidistant fields, which were uniformly distributed in a square raster over the entire sample surface. During these measurements, it was observed that dislocation pit density also had longitudinal symmetry similar to the twins. This was confirmed by taking measurements for 50 equidistant fields for sample 10 along three (3) transverse axes, e.g. along the top edge, along the bottom edge, and along the central axis. From the attached QTM data sheets for Sample 10, the following may be observed for dislocation pits from the average of 50 measurement fields:

	No.	No. /Area	L/A
transverse axis along top edge	287	0.008	0.010
transverse axis along center	360	0.010	0.010
transverse axis along bottom edge	368	0.010	0.011

The above data shows good agreement as far as "No./Area" and "L/A". There is good agreement as far as "No." is concerned for data along central axis and bottom transverse axis. The data along the top transverse axis is somewhat off (287) from the data for central axis (360) and bottom axis (368). However, this variation is not significant. On the other hand, significant error may be introduced for the case of 50 measurement fields taken in a square raster, if some of the large dislocation density areas are missed. Such an error is unlikely if the 50 fields are taken on a transverse axis, since the distance between fields not analyzed is only 0.01 mm. Therefore, a higher accuracy for dislocation density will be achieved if 50 equidistant fields are taken along the transverse central axis of the sample. Therefore, from MobilTyco sample No. 10 onwards all samples were analyzed for twins and dislocation density along 50 equidistant fields along the transverse central axis of the sample.

The distribution of dislocation pits in the IBM samples also have longitudinal symmetry. Therefore, the above procedure was used for measuring dislocation pits in the IBM samples. However, since the IBM samples are longer by 0.5 cm. compared to Mobil Tyco samples, 70 fields were chosen for analysis along the central transverse axis of each IBM sample to cover the additional 0.5 cm. in length.

Measurement of Average Area of Twins and Dislocation Pits:

Before measurements were made for twins, each sample was scanned to determine manually the average area of one twin. The method of determining the average twin area is as follows: First, the sample surface was randomly scanned, and those fields were selected where the twins were not touching each other. Each field, generally containing more than 5 distinct twins, were then displayed on the display module of the QTM. The total area of all the twins in each field was determined and divided by the number of twins in that field to get the average twin area for that field. The average twin area was then determined in an additional 4 fields. The arithmetic average was then calculated from the average twin area in these five fields. Generally, 30 to 40 twins are used in 5 fields to get the average twin area. The same procedure was used to obtain the average dislocation pit area. The average twin area in each sample was then fed into the Register (038) of the HP 9810. This is an important step to get actual number of twins and dislocation pits, especially in areas where the densities of these defects are high and they touch one another. In order to verify that the average area of a twin so obtained was accurate, an additional six fields were selected at random where the twin density were high, and the twins were touching one another. The twin density in each of these six fields were counted manually, and also counted by the QTM using the average area of a twin. The entire procedure was repeated until close agreement was reached between manual counting and QTM counting. After this procedure, measurements were then made on all the fields (50 for Mobil Tyco and 70 for IBM) using the automatic QTM mode.

Explanation of Teletype Printout:

The QTM measurements for twins and dislocation pits on Mobil Tyco samples 1 to 46 and IBM samples 1 to 7 are shown in attached teletype printouts. The first paragraph of the teletype printout gives the date, name of the manufacturer, sample number, name of the defect type being measured, size of the X and Y steps, and average values of twin area and dislocation pit area that were measured manually and fed into the Register 038 for each sample. In addition, the teletype print-out for twin measurements also shows that the QTM output data is divided by 100. This procedure was followed in order to avoid frequent overflow problems in the classifier-collector.

The second paragraph of the teletype printout lists: 1) the 800 X magnification that was used; 2) calibrated equivalent value of one picture point in the units being used i.e. mm for twins and microns for dislocation pits; and 3) calculated area of one field (frame) in the units being used. The frame area of a standard frame in the QTM is 500,000 picture points (pp). In case of twins, the standard frame was used. However, during dislocation density measurements the uneven sample surfaces caused problems in focusing dislocation pits over the entire standard frame. Therefore, during dislocation density measurements half the standard frame (250,000 pp) was used. This is shown under "Frame Area" in the QTM data sheets. The unit of measurement was millimeter for twins, and microns for dislocation pits.

The third paragraph of the teletype printout lists the titles for the different measurements, which are explained below:

Field: indicates the sequence number of the field in which measurements were made.

No: denotes the total number of features detected in any field. This is obtained by dividing the total area of a feature by the average area of that feature.

No. /Area: denotes the computed number of features/mm² or features/microns² in each field.

MFPV: denotes the mean free path in the vertical direction. This quantity is the frame area divided by the vertical projection of all detected features in the field (frame).

MFPH: denotes mean free path in the horizontal direction. This is the horizontal analogue of MFPV.

L/A: This quantity is length of detected features per unit area. The unit area is mm² in the case of twins and microns² in the case of dislocation pits.

Note: The quantity L/A is subject to large errors when twin bands are present. The QTM computes L/A by dividing the perimeter by 2. A twin band usually contains 20 to 100 individual twins, many of them touching one another. The QTM will compute L/A by dividing the perimeter of the twin band by 2. In other words, the QTM may count the entire twin band as one large area rather than consisting of several individual twins. Thus, L/A is subject to large errors and is underestimated by QTM.

AFETA: This denotes the average area of the features detected in each field. This is to be ignored in the attached teletype printouts, since the average area was determined manually at the start.

Note: The attached teletype printouts show, after 25 and 50 fields, the computed values of average, standard deviation, and standard error for all data from field No. 1 onwards. This averaging can be done at any time during the course of the measurement.

In the case of Mobil Tyco samples 1 and 2, the actual twin area was fed into the Register 038 of the HP 9810. However, the QTM output is always divided by 100. Therefore, the QTM output data for "NO", "No./Area", and "L/A" are to be multiplied by 100 to get the actual values. However, "MFPV" and "MFPH" are to be divided by 100 (because "area" is the numerator and "intercept distance" is the denominator) to get actual values.

For all other samples (except Mobil Tyco samples 1 and 2), the average twin area was divided by 100 before feeding into Register 038 of the HP 9810. Therefore, the QTM data for "No." and "No./Area" are actual and not to be multiplied by 100. However, "MFPV" and "MFPH" are to be divided by 100 and "L/A" is to be multiplied by 100 to obtain actual values.

The grain boundaries in each sample were counted under the binocular microscope using 7X magnification. Most of the grain boundaries were parallel or approximately parallel to the twins. In general, there were no complete grains in a sample, i.e., the grain boundaries were running from bottom edge to top edge of a sample.

SECTION V

R E S U L T S

The data on twins and dislocation pits for Mobil Tyco samples from 1 to 46 and for IBM samples from 1 to 7 are given separately in the attached teletype printouts. In addition to the teletype printouts, the average data for 50 fields for each Mobil Tyco sample has been summarized in Tables 2, 3, 4, and 5 for ease in correlation and comparison. The average data for 70 fields for each IBM sample has been listed in Table 6. In addition, Tables 3, 4, 5 and 6 give the grain boundary length $(\text{cm})/(\text{cm})^2$ for each sample. Table 2, however, lists the number of grain boundaries present in the entire sample surface for each sample (Nos. 1 to 18). The reason for this is because these samples were analyzed in the month of October, 1978 and had already been sent back to JPL.

Complete grain was not observed in any of these samples.

Observation of the data in Table 2 (samples Nos. 1 to 18) shows that, in general, samples having smaller twin densities have larger dislocation densities, and vice versa. For example, sample 6 has 18 twins/ mm^2 and 485 dislocations/field. The same data for sample 14 are 563 twins/ mm^2 and 143 dislocations/field. Thus, an inverse relationship exists between twin density and dislocation density. This inverse relationship, however, was not clearly observed in the Mobil Tyco sample Nos. 19 to 46. Nonetheless, a broad inverse relationship does exist between twins and dislocation pits in the samples taken out from the same ribbon (Tables 3, 4, and 5). In addition to the broad inverse relationship between twins and dislocation

pits, another interesting feature has been observed in the case of IBM samples. As per the diagram provided by JPL (Fig. 1), the 7 IBM samples were cut from the same ribbon and were designated specimens A to G. The twin density decreases systematically from specimen A to G as shown in Figure 2. The twin density in specimen A is $621.5/\text{mm}^2$ and in G is $224.5/\text{mm}^2$. Similar plots were also prepared for all Mobil Tyco samples (Nos. 19 to 46) cut from the same ribbon, but no such relationship has been discovered. There is, however, no relationship between dislocation pits or grain boundary length/ cm^2 and the specimen position.

Table 3 also lists number of silicon carbide particles in each sample surface. This was obtained by visually counting the particles in the as-received condition (before polishing).

SECTION VI

C O N C L U S I O N S

Polishing and etching procedures have been perfected for Mobil Tyco, Wacker, and IBM silicon samples for obtaining proper contrast of structural defects suitable for QTM analyses.

A computer program for automated quantitative image analyses of grain boundaries, twin boundaries, and dislocation pits using a Quantimet 720 Image Analyzer has been perfected and is being used routinely.

Data collected on fortysix (46) Mobil Tyco and Seven (7) IBM samples using the Quantimet 720 Image Analyzer is discussed.

SECTION VII

REFERENCES

1. R. Natesh, J. M. Smith, H. A. Qidwai: "Quantitative Analysis of Defects in Silicon," Quarterly Progress Report No. 2, DOE/JPL 954977, Materials Research, Inc., Technical Report: MRI-260, 1978.
2. R. Natesh: "Quantitative Analysis of Defects in Silicon," One-Time Report on Crystal Cleaning and Polishing Preparation Technique, DOE/JPL 954977, Materials Research Inc., Technical Report: MRI-254, 1978.
3. R. Natesh, H. A. Qidwai: "Quantitative Analysis of Defects in Silicon," One-Time Report on Crystal Etching Preparation Technique, DOE/JPL 954977, Materials Research Inc., Technical Report: MRI-259, 1978.

T A B L E 1

CHEMICAL POLISHING OF MOBIL TYCO SAMPLES

Polishing solution: mixture of HNO_3 : HF : CH_3COOH = 1:2:3 by volume

Temperature ($^{\circ}\text{C}$)	Time (Sec.)	Surface Condition
50	30	Growth lines persist. Sub-grain type structures present
50	40	Good even polishing
50	50	Faceting develops

T A B L E 2

ANALYSIS OF MOBIL TYCO SAMPLES

Sample No. MRI	Average No. of Twins/ field	Average No. of Twins/mm ²	No. of grain Boundaries	Average No.of dislocations/ field	Average No.of dislocations/ 2 μ m
1	18.0	261.2	5	362.6	0.010
2	26.0	368.5	2	698.6	0.020
3	31.8	451.9	2	411.4	0.012
4	13.1	186.8	5	256.3	0.007
5	14.6	207.9	6	387.8	0.011
6	1.3	18.4	6	485.3	0.014
7	9.7	137.7	5	505.8	0.014
8	16.7	238.1	8	495.4	0.014
9	24.6	350.3	0	401.0	0.011
10	15.8	224.7	7	368.0	0.010
11	32.8	466.1	4	250.4	0.007
12	13.2	188.0	4	578.1	0.016
13	27.2	387.0	1	353.6	0.010
14	39.6	563.3	0	143.2	0.004
15	27.0	384.0	7	227.6	0.006
16	33.0	470.0	4	197.1	0.006
17	34.5	490.5	1	214.1	0.006
18	11.4	162.2	4	503.7	0.014

T A B L E 3

ANALYSIS OF MOBIL TYCO SAMPLES

MRI Sample #(Mobil Tyco)	JPL No.	Ave.No.of Twins/field	No.of Si Carbide Particles	Ave.No.of Twins/mm ²	Grain boundary length/cm ²	Ave.No.of Disl./field	Ave.No.of Disl./μm ²
19	5-685 A	24.40	37	347.085	1.22	2759.08	0.078
20	5-685 B	14.76	55	209.916	0.89	3702.18	0.105
21	5-685 C	21.25	21	302.189	1.39	2480.51	0.071
22	5-685 E	14.52	50	206.449	0.54	3595.42	0.102
23	5-685 F	20.76	27	295.247	1.08	2219.70	0.063
24	5-685 G	23.26	28	330.782	1.91	1191.12	0.034
25	5-685 H	19.10	48	271.659	0.88	1796.13	0.051
26	5-685 J	17.78	23	252.923	0.80	1818.59	0.052
27	5-685 K	12.87	30	182.978	1.82	2914.59	0.083
28	5-685 M	18.86	21	268.240	0.93	3536.89	0.101
29	5-685 N	15.45	28	219.769	1.15	2606.93	0.074
30	5-685 P	17.87	18	254.185	1.02	2960.46	0.084

T A B L E 4

ANALYSIS OF MOBIL TYCO SAMPLES

MRI Sample # (Mobil Tyco)	JPL No.	Avg. No. of Twins/field	Avg. No. of Twins/mm ²	Grain boundary length/cm ²	Avg. No. of Dislocation Pits/field	Avg. No. of Dislocation Pits/ μ m ²
31	5-744 E	28.10	399.595	1.12	792.45	0.023
32	5-744 F	19.60	278.780	1.76	814.16	0.023
33	5-744 H	25.96	369.253	2.32	1161.55	0.033
34	5-744 G	22.05	313.650	2.51	1512.83	0.043
35	5-744 A	16.89	240.180	2.01	2704.46	0.077
36	5-744 B	29.35	417.464	1.20	1861.84	0.053
37	5-744 C	51.78	736.382	1.74	1189.71	0.034
38	5-744 D	59.35	844.084	0.74	1266.99	0.036

T A B L E 5

ANALYSIS OF MOBIL TYCO SAMPLES

MRI Sample No.	JPL No.	Avg. No. of Twins/field	Avg. No. of Twins/mm ²	Grain boundary length/cm ²	Avg. No. of Dislocation Pits/field	Avg. No. of Dislocation Pits/ μm^2
39	5-742 A	38.83	552-220	1.76	2740.94	0.078
40	5-742 B	28.15	400.298	1.6	1798.02	0.051
41	5-742 C	53.75	764.416	1.50	949.78	0.027
42	5-742 D	46.79	665.410	1.57	846.78	0.024
43	5-742 E	45.57	648.059	0.80	1904.34	0.054
44	5-742 F	29.32	416.969	1.76	2705.71	0.077
45	5-742 G	49.34	701.677	2.11	1780.49	0.051
46	5-742 H	48.64	691.801	0.64	1979.37	0.056

T A B L E 6

ANALYSIS OF IBM SAMPLES

MRI Sample No.	JPL No.	Avg. No. of Twins/field	Avg. No. of Twins/mm ²	Grain boundary length/cm ²	Avg. No. of Dislocation Pits/field	Avg. No. of Dislocation Pits/ μm^2
1	4-457 A	43.70	621.581	1.3	460.56	0.013
2	4-457 B	41.30	587.374	1.5	205.37	0.006
3	4-457 C	39.96	568.254	1.12	373.20	0.011
4	4-457 D	37.25	529.826	0.51	302.98	0.009
5	4-457 E	29.82	424.114	0.52	328.91	0.010
6	4-457 F	38.09	541.730	1.33	405.75	0.012
7	4-457 G	15.79	224.585	1.5	342.75	0.010

Ribbon Identified as
IBM #4-457

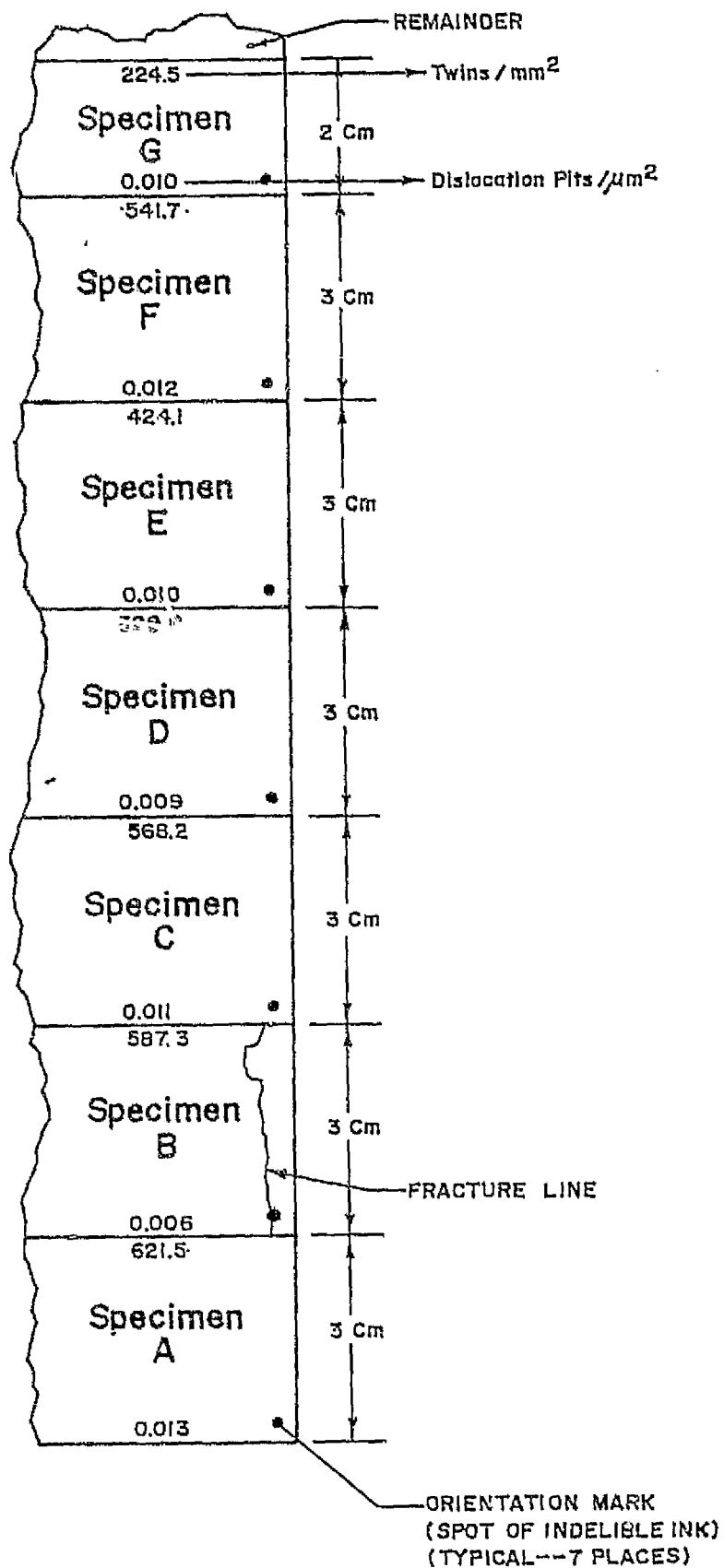


Fig. 1. Schematic sketch showing locations of specimens from IBM Ribbon No. 4-457.

IBM #1-7
JPL 4-457 Spec A-G

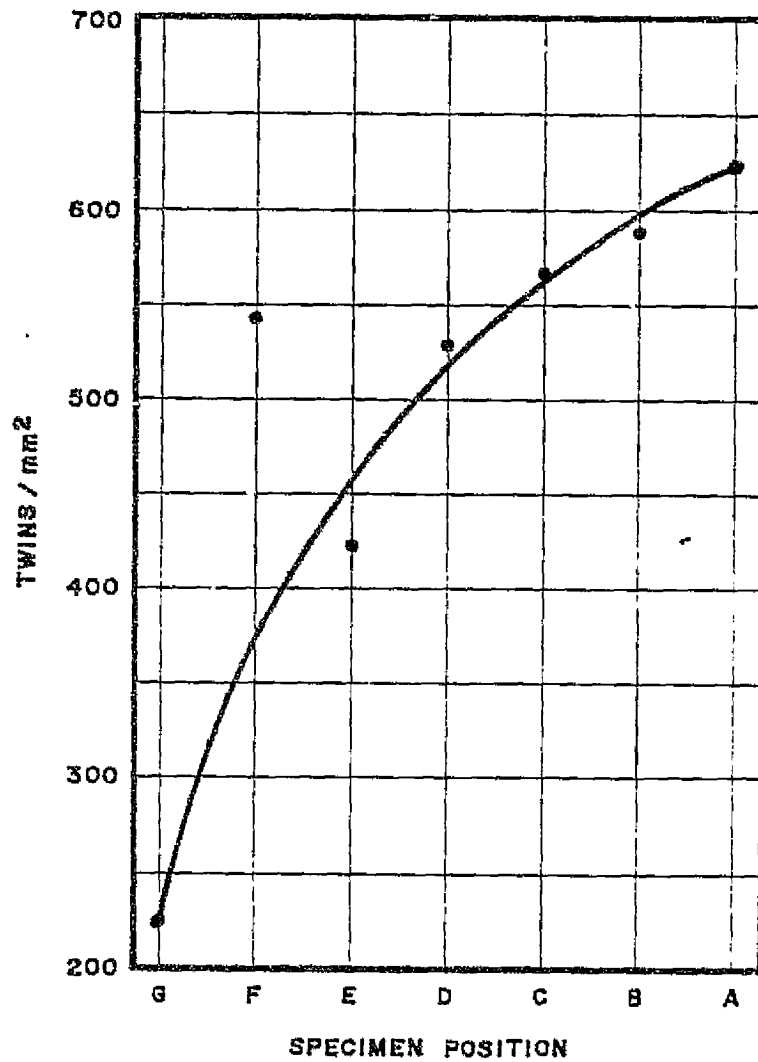


Fig.2. Graphical plot showing systematic variation in twin density with respect to specimen location in IBM Ribbon No. 4-457.

MOBIL TYCO SAMPLE NUMBER 1
 TWINS ONLY
 AVERAGE TWIN AREA - 3682PP
 STM OUT PUT DATA DIVIDED BY 137

13/17/78

MAG-837.7 UNITS-MM CAL. FACTOR-
 FRAME AREA- 3.077313

1.000375 UNITS/PP

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.02	0.236	62.500	14.423	0.372	1.000004
2	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
3	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
5	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
6	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
7	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
8	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
9	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
10	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
11	0.06	0.919	15.625	4.934	0.224	1.000007
12	0.15	2.086	10.417	2.568	0.424	0.000007
13	0.12	1.883	8.152	2.930	0.387	1.000010
14	0.34	0.537	18.750	5.859	0.187	1.000005
15	0.32	0.297	26.786	13.393	0.185	1.000004
16	0.05	0.672	17.045	6.250	0.179	1.000008
17	0.53	7.478	2.604	1.641	1.303	1.000016
18	0.58	8.189	1.953	0.727	1.568	1.000009
19	0.46	6.613	3.989	1.516	0.712	1.000016
20	0.01	0.135	62.500	14.423	0.372	1.000002
21	0.28	4.048	6.048	0.107	0.539	0.000012
22	0.91	13.005	2.206	0.636	1.757	1.000018
23	0.64	9.035	3.750	0.915	1.192	1.000016
24	0.66	12.248	1.875	0.545	2.037	0.000016
25	0.23	3.260	9.868	2.404	0.456	0.000011

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	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.20	2.818	SSSSSSSSSS	SSSSSSSSSS	0.449	SSSSSSSSSSSSSS
SD	0.28	4.225	SSSSSSSSSS	SSSSSSSSSS	0.611	SSSSSSSSSSSSSS
SE	0.06	0.805	SSSSSSSSSS	SSSSSSSSSS	0.122	SSSSSSSSSSSSSS

26	0.04	0.606	17.045	5.357	0.187	1.000003
27	0.32	0.290	62.500	14.423	0.372	0.000005
28	0.01	0.073	93.750	26.786	0.337	1.000003
29	0.31	0.128	187.500	31.250	0.335	1.000004
30	0.01	0.085	93.750	31.250	0.037	1.000003
31	0.46	6.489	4.808	1.630	0.696	1.000024
32	0.38	1.109	11.029	3.538	0.312	1.000006
33	0.98	14.002	1.875	0.383	2.824	1.000013
34	0.01	0.077	93.750	29.333	1.051	1.000001
35	0.23	3.229	6.696	2.717	1.429	1.000012
36	0.06	0.796	15.625	4.464	0.245	1.000004
37	0.05	0.691	23.438	5.682	0.187	1.000004
38	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
39	0.01	0.178	62.500	15.625	0.369	1.000006
40	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
41	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
42	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
44	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
45	0.01	0.377	93.750	31.250	0.337	1.000003
46	0.03	0.467	46.875	9.868	0.139	1.000006
47	0.06	0.842	11.029	4.167	0.272	0.000005
48	0.94	13.357	4.167	1.476	1.787	0.000041
49	0.80	11.329	1.953	0.928	1.309	1.000034
50	0.45	6.377	2.435	3.956	1.333	1.000014

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.18	2.612	SSSSSSSSSS	SSSSSSSSSS	0.405	SSSSSSSSSSSSSS
SD	0.29	4.152	SSSSSSSSSS	SSSSSSSSSS	0.620	SSSSSSSSSSSSSS
SE	0.34	0.587	SSSSSSSSSS	SSSSSSSSSS	0.088	SSSSSSSSSSSSSS

MOBIL TYCO SAMPLE #1 11/15/78
 DISLOCATION PITS ONLY /VERSION ?
 2.5MM X4 Y STEP SIZE (17.5 X 27 MM MATRIX)
 AVG PIT AREA 5.58PP
 DATE ABOVE IS INCORRECT. CORRECT DATE 11/15/78

has one hole at corner

MAG-899.7 UNITS-MICRONS CAL. FACTOR- 1.375133 UNITS/PP
 FRAME AREA- 3.515625777 34

FIELD	NO.	NO./AREA	MFPV	VFPH	L/A	AFETA
1	164.61	0.025	332.419	337.230	1.025	1.664359
2	756.16	0.022	59.981	48.985	0.025	1.715865
3	467.43	0.013	79.452	94.793	1.024	1.979946
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
5	35.21	0.001	1284.247	1536.885	1.021	1.654412
6	275.70	0.008	152.482	167.112	1.011	1.141030
7	461.27	0.013	82.672	100.806	1.018	1.400933
8	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
9	212.85	1.006	182.393	213.554	1.009	1.317951
10	398.59	0.011	101.792	100.160	0.016	1.137054
11	981.69	0.028	43.544	47.516	1.038	1.460196
12	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
13	31.16	0.001	1802.885	1802.885	1.001	1.111328
14	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
15	289.44	0.008	144.009	170.455	1.011	1.583476
16	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
17	206.69	0.006	186.012	197.785	1.008	1.423222
18	452.46	0.013	99.311	96.949	1.017	1.390024
19	1123.06	0.032	40.081	38.740	1.045	1.254611
20	27.64	0.001	2286.585	852.273	1.001	2.759766
21	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
22	5.11	0.000	4261.364	5514.706	0.000	1.815625
23	145.77	0.004	230.344	274.927	1.006	1.200387
24	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
25	103.70	0.003	859.195	389.004	1.005	1.218061

AVERAGE						
	NO.	NO./AREA	MFPV	VFPH	L/A	AFETA
	245.54	1.007	SSSSSSSSSS	SSSSSSSSSS	1.010	SSSSSSSSSSSSSS
SD	309.47	0.009	SSSSSSSSSS	SSSSSSSSSS	0.012	SSSSSSSSSSSSSS
SE	61.89	0.002	SSSSSSSSSS	SSSSSSSSSS	0.002	SSSSSSSSSSSSSS

26	1027.99	0.029	42.985	42.240	1.039	1.394074
27	1126.58	0.082	36.422	40.167	1.045	1.325272
28	616.55	0.018	64.566	74.287	1.023	1.391155
29	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
30	2.29	0.000	11718.750	10416.467	0.000	1.195313
31	727.11	1.021	59.186	62.962	0.027	1.424001
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
33	716.37	1.020	56.784	71.565	1.027	1.430538
34	1074.30	0.031	42.491	47.832	0.038	1.600921
35	230.28	0.007	179.942	207.412	1.009	1.156840
36	12.15	0.000	9375.000	9375.000	0.000	9.703125
37	15.49	0.000	1953.125	2083.733	0.001	1.773438
38	483.45	0.014	87.291	107.511	1.018	1.409329
39	213.20	0.006	214.041	245.419	1.007	1.653368
40	849.82	0.024	49.290	59.411	1.030	1.701245
41	1391.37	0.040	31.439	35.364	1.052	1.460393
42	357.92	0.010	107.265	125.334	1.015	1.317468
43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
44	133.10	0.004	299.521	328.947	0.005	1.586754
45	269.72	0.008	166.815	203.762	1.008	2.133045
46	194.89	0.006	214.531	237.944	0.007	2.048314
47	905.63	0.026	49.551	55.506	1.032	1.670387
48	1540.85	0.044	26.100	28.775	1.060	1.389198
49	98.94	1.003	411.184	405.844	1.004	1.519832
50	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS

AVERAGE						
	NO.	NO./AREA	MFPV	VFPH	L/A	AFETA
	362.55	0.010	SSSSSSSSSS	SSSSSSSSSS	1.014	SSSSSSSSSSSSSS
SD	416.73	0.012	SSSSSSSSSS	SSSSSSSSSS	1.016	SSSSSSSSSSSSSS
SE	58.93	1.002	SSSSSSSSSS	SSSSSSSSSS	1.002	SSSSSSSSSSSSSS

ORIGINAL PAGE IS
 OF POOR QUALITY.

MORIL TYCO SAMPLE NUMBER 2
 TWINS ONLY
 AVERAGE TWIN AREA 3682 PP
 QTM OUT PUT DATA DIVIDED BY 100
 DISREGARD AFETA
 TWINS ONLY

13/17/78

MAG-800.0 UNITS-MM CAL. FACTOR- 1.000375 NITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.75	0.730	12.500	3.472	3.312
2	0.03	0.467	20.833	5.859	2.189
3	0.20	2.843	7.212	1.769	3.619
4	0.31	0.162	187.500	31.250	3.035
5	0.30	0.000	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	1.000
6	0.01	0.097	93.750	31.250	3.037
7	0.09	1.333	13.393	1.995	3.525
8	0.22	3.063	11.719	1.659	3.635
9	0.18	2.580	15.625	2.500	3.427
10	0.60	8.533	5.859	1.371	1.000
11	1.04	14.805	1.752	0.638	1.856
12	0.90	12.836	2.467	1.019	1.173
13	0.76	10.804	2.930	0.644	1.691
14	0.83	11.862	3.750	0.623	1.734
15	0.65	9.185	6.466	1.293	3.843
16	0.89	12.627	3.233	0.868	1.269
17	1.06	15.387	4.167	0.966	1.152
18	1.06	15.030	3.074	0.772	1.456
19	0.50	7.134	5.357	1.030	1.343
20	0.34	4.805	6.348	1.053	1.311
21	0.35	4.952	4.934	0.910	1.176
22	0.18	2.499	9.868	1.838	3.584
23	0.31	0.189	62.500	14.423	0.072
24	0.11	1.514	13.393	2.500	0.427
25	0.26	3.673	6.250	1.225	3.875

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.41	5.872	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	1.804	\$\$\$\$\$\$\$\$\$
SD	0.37	5.279	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	1.542	\$\$\$\$\$\$\$\$\$
SE	0.37	1.756	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	1.108	\$\$\$\$\$\$\$\$\$

26	0.22	3.059	8.152	1.537	3.693	3.33310
27	0.08	1.085	20.833	3.750	1.285	1.03336
28	0.10	1.476	11.719	2.717	3.400	3.03337
29	0.17	2.406	8.152	1.953	1.560	1.33336
30	0.16	2.337	8.523	2.131	1.520	1.33339
31	0.14	1.997	11.129	2.116	1.525	0.33336
32	0.06	3.846	23.438	5.357	1.203	1.33336
33	0.28	3.959	8.523	1.752	3.619	3.00010
34	0.25	3.623	6.696	1.913	3.587	3.00012
35	0.02	0.305	46.875	9.868	1.109	3.00006
36	0.03	0.491	37.500	7.212	0.152	3.00034
37	0.12	1.669	18.750	3.409	3.312	3.00010
38	0.13	1.804	12.500	2.717	1.397	1.00007
39	0.01	0.112	187.500	31.250	0.035	1.00004
40	0.00	0.000	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$\$
41	0.02	0.239	62.500	14.423	1.072	1.00004
42	0.03	0.363	37.500	7.813	1.139	1.00003
43	0.00	0.000	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	1.302	\$\$\$\$\$\$\$\$\$
44	0.07	1.058	5.682	3.827	1.320	1.00001
45	0.10	1.479	8.523	2.315	1.493	1.00003
46	0.06	0.834	23.438	5.208	1.211	1.00005
47	0.32	4.496	3.348	3.880	1.251	1.00008
48	0.12	1.742	11.719	3.324	1.360	1.00006
49	0.34	1.630	18.750	6.944	0.160	1.00006
50	0.10	1.433	11.329	2.016	1.525	1.00004

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.26	3.685	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	0.581	\$\$\$\$\$\$\$\$\$
SD	0.31	4.413	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	1.484	\$\$\$\$\$\$\$\$\$
SE	0.04	0.624	\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$	1.068	\$\$\$\$\$\$\$\$\$

DATE 11/26/78
MOBIL TYCO SAMPLE # 2
DISLOCATION PITS ONLY

VERSION 2 (IGNORE AFETA)
AVERAGE DISLOCATION PIT AREA = 1.5 22

MAG-800.3 UNITS-MICRONS CAL. FACTOR- 1.375311 UNITS/22
FRAME AREA- 3.515625331 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	578.33	0.316	78.321	76.937	0.321	1.728237
2	2953.56	0.484	25.573	23.233	0.473	1.5293333
3	4342.11	0.124	12.895	12.435	0.130	1.762524
4	4042.26	0.115	14.272	14.874	0.113	1.461318
5	2112.38	0.360	28.386	28.735	0.356	1.514595
6	1233.62	0.034	38.517	43.655	0.341	1.376295
7	369.81	0.011	119.732	122.739	0.314	1.663134
8	1077.55	0.031	53.694	47.929	0.033	1.417014
9	328.32	0.039	124.668	124.668	0.314	1.489922
10	612.54	0.017	73.645	81.522	0.322	1.854844
11	865.17	0.025	46.619	46.526	0.037	1.416132
12	365.79	0.013	120.812	123.681	0.015	1.712873
13	312.37	0.309	130.571	125.334	0.014	1.389736
14	443.50	0.313	92.392	92.638	0.318	1.361117
15	394.89	0.311	104.167	116.895	0.314	1.784748
16	134.67	0.304	267.857	262.635	0.337	1.719531
17	1233.03	0.035	35.906	37.217	0.346	1.963362
18	416.41	0.012	110.947	112.545	0.315	1.751332
19	2033.65	0.058	23.615	24.529	0.367	1.263685
20	1398.45	0.037	38.359	37.173	0.344	1.188428
21	3.13	0.033	15625.330	23437.500	0.303	1.476253
22	242.72	0.007	187.523	186.312	0.339	1.741667
23	324.15	0.039	151.454	149.977	0.311	1.333819
24	775.54	0.322	55.572	57.095	0.031	1.673471
25	557.59	0.016	73.357	69.393	0.324	1.295476

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1881.48	0.331	795.329	1317.637	0.335	1.746122
SD 1143.21	0.333	3746.334	4576.834	0.332	1.771569
SE 228.64	0.307	639.207	915.361	0.346	1.154314

26	496.93	0.314	86.157	28.583	0.321	1.376239
27	429.57	0.312	93.376	96.949	0.318	1.759732
28	294.58	0.038	133.896	138.382	0.315	1.931342
29	475.54	0.314	76.656	66.774	0.323	1.953642
30	325.39	0.339	113.335	93.358	0.317	1.778839
31	82.23	0.332	498.673	493.421	0.334	1.582763
32	128.79	0.334	363.372	393.938	0.334	1.953777
33	116.25	0.333	338.448	363.372	0.335	1.538735
34	72.76	0.332	538.793	575.153	0.333	1.468753
35	97.83	0.003	404.095	385.802	0.004	1.645833
36	3705.88	0.105	33.607	20.917	0.029	1.623071
37	49.23	0.001	694.444	629.195	0.002	1.719952
38	178.17	0.005	251.340	285.823	0.006	1.102370
39	202.79	0.006	248.016	181.335	0.008	1.918945
40	92.88	0.003	444.313	308.388	0.004	1.562500
41	336.69	0.013	101.461	132.459	0.317	1.358337
42	111.30	0.003	310.430	353.774	0.005	1.218185
43	122.14	0.003	321.362	366.211	0.005	1.499367
44	233.83	0.007	182.339	189.312	0.010	1.487035
45	53.31	0.001	852.273	956.433	0.002	1.523438
46	94.89	0.003	457.317	551.471	0.003	1.724063
47	216.87	0.306	223.588	237.271	0.337	1.970155
48	1.33	0.333	555555555	555555555	0.333	555555555555
49	1.33	0.333	555555555	555555555	0.333	555555555555
53	6.35	0.333	5514.746	11718.753	0.330	1.882813

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
698.60	0.020	555555555	555555555	0.022	555555555555
SD 1024.30	0.029	555555555	555555555	0.024	555555555555
SE 144.82	0.334	555555555	555555555	0.334	555555555555

ORIGINAL PAGE IS
0

DATE 11/26/78
MOBIL TYCO SAMPLE # 2
DISLOCATION PITS ONLY

VERSION 2 (IGNORE AFETA)
AVERAGE DISLOCATION PIT AREA = 1.5 00

MAG-827.3 UNITS-MICRONS CAL. FACTOR- 3.375000 UNITS/PP
FRAME AREA- 3.815625337 34

FIELD	NJ.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	578.33	3.316	78.321	76.937	3.321	1.728237
2	2953.56	3.384	25.573	23.233	3.373	4.293030
3	4342.11	3.124	12.895	12.435	3.130	3.762524
4	4042.26	3.115	14.272	14.874	3.113	3.461318
5	2112.38	3.360	28.386	28.795	3.354	3.514595
6	1233.62	3.334	38.517	40.655	3.341	3.376225
7	369.81	3.311	119.732	122.799	3.314	1.663134
8	1877.55	3.331	53.694	47.929	3.333	3.417814
9	328.02	3.339	124.668	124.668	3.314	1.489922
10	612.54	3.317	73.645	81.522	3.322	1.854844
11	865.17	3.325	46.619	46.526	3.337	1.416132
12	365.79	3.313	120.812	123.681	3.315	1.712870
13	312.37	3.309	130.571	125.334	3.314	1.389796
14	443.50	3.313	92.392	92.638	3.318	1.361117
15	394.89	3.311	104.167	116.895	3.314	1.784748
16	134.67	3.304	267.857	262.635	3.337	1.319531
17	1238.03	3.335	35.936	37.217	3.346	1.963362
18	416.41	3.312	110.947	112.545	3.315	1.751332
19	2039.65	3.358	23.615	24.529	3.367	2.263685
20	1398.45	3.337	38.359	37.173	3.344	3.188428
21	3.13	3.333	15625.330	23417.500	3.303	1.476253
22	342.72	3.307	187.523	186.312	3.339	2.341567
23	324.13	3.339	151.454	140.977	3.311	2.337819
24	775.54	3.322	55.572	57.895	3.331	1.673471
25	557.59	3.316	73.357	69.393	3.324	1.295476

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	1387.48	3.331	735.329	1317.637	3.335	2.346132
SD	1143.21	3.333	3346.334	4576.934	3.332	1.771569
SE	228.64	3.307	609.207	915.361	3.306	3.154314

26	496.93	3.314	86.167	28.583	3.321	1.376239
27	429.57	3.312	93.376	96.949	3.318	1.359732
28	294.58	3.338	133.806	138.382	3.315	1.931342
29	475.54	3.314	76.656	66.774	3.323	1.953642
30	325.39	3.339	113.335	90.358	3.317	1.379879
31	82.23	3.332	498.673	493.421	3.334	1.528763
32	138.79	3.334	363.372	393.908	3.334	1.953177
33	116.25	3.333	338.448	363.372	3.335	1.538735
34	72.76	3.332	538.793	575.153	3.333	1.468753
35	97.83	3.333	404.095	385.802	3.304	1.645833
36	3705.88	3.135	38.607	20.917	3.329	1.622071
37	49.23	3.301	694.444	629.195	3.302	1.719952
38	178.17	3.305	251.340	285.823	3.306	2.102770
39	292.79	3.336	248.016	181.335	3.338	1.918945
40	92.88	3.303	444.313	308.388	3.304	1.562500
41	336.69	3.313	101.461	102.459	3.317	1.058337
42	111.38	3.303	310.430	353.774	3.335	1.218185
43	122.14	3.303	321.362	366.211	3.335	1.499367
44	233.83	3.307	182.339	189.112	3.310	1.487035
45	52.31	3.331	852.273	956.433	3.332	1.923438
46	94.89	3.303	457.317	551.471	3.333	1.724063
47	216.87	3.336	223.588	277.271	3.337	1.970155
48	1.30	3.333	555555555	555555555	3.333	5555555555
49	1.33	3.333	555555555	555555555	3.333	5555555555
50	6.35	3.330	5514.796	11718.753	3.330	3.882813

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	698.63	3.320	555555555	555555555	3.322	5555555555
SD	1024.30	3.329	555555555	555555555	3.326	5555555555
SE	144.82	3.334	555555555	555555555	3.334	5555555555

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MOBIL TYCO SAMPLE #3 11/13/78(11/13/78)
 TWINS ONLY AVG TWIN AREA 11 X 111
 JFM DATA DIVIDED BY 111
 DISREGARD AFETA (VERSION 2)

MAG-830.3 UNITS-MM CAL. FACTOR- 1.111175 UNITS/PP
 FRAME AREA- 3.37313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	1.36	15.143	187.503	31.253	3.335	1.333333
2	3.00	3.333	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSSSS
3	3.33	3.333	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSSSS
4	3.33	3.333	SSSSSSSSSS	SSSSSSSSSS	3.333	SSSSSSSSSSSSSS
5	8.32	118.366	23.833	7.212	3.155	1.333333
6	42.61	646.350	2.183	1.488	3.936	1.333333
7	33.29	473.462	2.131	1.284	3.984	1.000337
8	35.45	504.201	2.933	1.179	3.968	1.333337
9	15.03	213.792	5.859	3.348	1.355	1.333333
10	44.58	634.336	2.107	1.987	1.205	1.333337
11	49.58	725.147	2.373	1.213	3.997	1.333337
12	16.55	235.355	8.523	3.989	3.331	1.333332
13	16.97	241.319	4.076	1.550	3.723	1.000334
14	23.42	333.375	4.464	2.259	3.544	1.333339
15	22.35	317.935	7.503	2.360	3.533	1.333339
16	61.55	875.355	3.472	1.512	3.779	1.000316
17	52.23	742.767	4.464	1.059	1.751	1.000319
18	64.32	914.810	6.466	1.465	3.747	1.000318
19	71.68	1019.412	4.688	1.410	1.833	1.000331
20	12.45	177.793	8.523	2.534	3.453	1.333335
21	68.29	857.462	3.348	1.379	3.851	1.000313
22	68.03	967.573	2.641	1.157	1.029	1.000314
23	80.23	1143.989	2.315	0.615	1.827	1.000309
24	24.19	344.086	7.212	2.038	3.544	1.000308
25	73.74	1048.774	4.261	1.933	3.627	1.333321
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	35.12	499.448	SSSSSSSSSS	SSSSSSSSSS	1.658	SSSSSSSSSSSSSS
SD	25.59	363.947	SSSSSSSSSS	SSSSSSSSSS	1.433	SSSSSSSSSSSSSS
SE	5.12	72.788	SSSSSSSSSS	SSSSSSSSSS	1.387	SSSSSSSSSSSSSS
26	117.23	1667.211	3.206	1.194	1.743	1.333334
27	69.71	991.427	2.930	0.733	1.485	1.333339
28	53.68	763.412	3.348	3.936	1.238	1.333337
29	3.33	3.333	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSSSS
30	113.68	1574.379	4.363	1.253	3.893	1.333333
31	37.26	529.892	5.357	2.183	1.552	1.333332
32	9.19	133.753	14.423	4.363	1.259	1.333334
33	3.33	3.333	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSSSS
34	3.33	3.333	SSSSSSSSSS	SSSSSSSSSS	3.333	SSSSSSSSSSSSSS
35	3.74	13.552	93.750	31.253	3.035	1.000303
36	0.77	11.011	187.500	31.250	3.035	1.000303
37	3.06	43.584	46.875	26.786	3.045	1.000313
38	1.74	24.774	46.875	31.250	3.043	1.000308
39	1.90	27.068	46.875	17.345	3.075	1.000302
40	12.32	175.254	9.868	2.344	3.461	1.333334
41	8.55	121.577	26.786	4.361	1.245	1.333335
42	2.68	38.379	62.500	15.625	3.369	1.000306
43	28.19	403.975	4.360	1.856	3.627	1.000311
44	4.81	68.358	26.786	7.813	3.139	1.000305
45	68.52	974.452	5.859	2.841	3.435	1.000343
46	42.13	599.168	9.868	1.933	3.560	1.000315
47	65.23	927.656	1.953	3.744	1.533	1.000309
48	42.65	606.509	3.324	1.488	3.833	1.000313
49	29.74	422.996	4.573	1.894	3.616	1.000313
50	3.33	3.333	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSSSS
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	31.77	451.903	SSSSSSSSSS	SSSSSSSSSS	3.552	SSSSSSSSSSSSSS
SD	30.47	433.348	SSSSSSSSSS	SSSSSSSSSS	1.464	SSSSSSSSSSSSSS
SE	4.31	61.285	SSSSSSSSSS	SSSSSSSSSS	1.066	SSSSSSSSSSSSSS

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MOBILE TYPED SAMPLE #3 11/15/79
 DISLOCATION PITS ONLY AVG DISL PIT AREA 2.5422
 VERSION 2 (IGNORE AFETA)
 2.5MM X & Y STEPS (17.5 X 23 MM MATRIX)

MAG-833.3 UNITS-MICRONS CAL. FACTOR- 1.175111 UNITS/PO
 FRAME AREA- 3.515625333 34

FIELD NO. NO./AREA MFPV MFPH L/A AFETA
 FRAME AREA- 3.515625333 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	640.63	0.018	59.186	59.048	1.027	2.442411
2	9.13	0.000	3472.222	3232.759	0.000	2.191759
3	261.24	0.037	132.228	126.178	0.013	1.795378
4	0.00	0.000	55555555	55555555	0.000	5555555555
5	886.65	0.025	42.672	45.978	1.037	2.622691
6	291.92	0.008	134.312	128.777	1.013	2.291362
7	187.94	0.005	321.062	345.941	1.085	7.521438
8	2262.41	0.064	18.959	20.917	1.082	3.465581
9	0.00	0.000	55555555	55555555	0.000	5555555555
10	42.15	0.001	1157.407	808.193	0.002	2.812520
11	243.91	0.007	124.532	128.955	0.014	1.408278
12	0.94	0.000	46875.000	23437.500	1.000	1.562500
13	986.42	0.028	36.422	40.357	0.043	2.388357
14	884.54	0.014	81.380	89.403	1.021	2.494571
15	22.25	0.001	1102.941	1253.003	1.001	1.335938
16	911.24	0.026	41.871	47.182	1.038	2.593232
17	133.44	0.004	224.282	247.361	0.007	1.477889
18	342.15	0.013	112.410	121.281	0.014	2.431398
19	2.11	0.000	6250.000	8522.727	0.000	1.265625
20	770.49	0.022	53.510	57.978	1.029	3.063949
21	2263.11	0.064	17.563	18.218	0.093	2.688335
22	24.59	0.001	1302.083	1143.293	0.002	1.406259
23	304.45	0.009	131.671	135.870	0.012	2.504281
24	0.00	0.000	55555555	55555555	0.000	5555555555
25	451.64	0.013	83.556	68.833	1.022	1.994083

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	463.81	0.013	55555555	55555555	1.019	5555555555
SE	614.55	0.017	55555555	55555555	1.024	5555555555
	122.91	0.003	55555555	55555555	1.005	5555555555

26	137.82	0.004	258.978	254.755	1.007	1.883859
27	7.00	0.000	55555555	55555555	0.000	5555555555
28	575.00	1.016	55.245	59.011	1.000	1.695183
29	1132.69	0.031	35.158	34.942	1.047	2.343833
30	65.57	0.002	220.833	554.734	1.000	2.187533
31	258.67	0.007	126.348	111.178	1.015	1.735422
32	996.37	0.028	38.884	41.741	1.041	2.533332
33	0.00	0.000	55555555	55555555	0.000	5555555555
34	59.13	0.002	496.132	488.281	0.003	1.339917
35	0.00	0.000	55555555	55555555	0.000	5555555555
36	715.57	0.020	47.832	54.191	1.032	2.164633
37	11.59	0.000	2604.167	2604.147	1.001	1.544875
38	0.00	0.000	55555555	55555555	0.000	5555555555
39	716.98	0.020	58.557	62.168	0.027	2.928731
40	385.13	0.011	76.997	80.128	0.022	1.274148
41	0.35	0.000	18750.000	23437.500	1.000	5555555555
42	111.01	0.003	344.649	340.909	0.005	2.298491
43	0.00	0.000	55555555	55555555	0.000	5555555555
44	1254.92	0.036	34.800	15.244	1.045	1.409679
45	361.12	0.010	121.912	112.816	1.013	2.872133
46	15.34	0.000	2757.353	2467.135	1.000	2.312734
47	866.74	1.025	49.423	52.462	1.032	3.388743
48	932.55	0.027	38.564	39.979	1.043	2.366375
49	267.13	0.008	141.190	137.262	0.012	2.411772
50	215.34	0.006	196.954	198.623	1.004	2.905723

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	411.41	0.012	55555555	55555555	1.017	5555555555
SE	523.63	0.015	55555555	55555555	1.021	5555555555
	73.63	0.002	55555555	55555555	1.003	5555555555

MOBIL TYCO SAMPLE #4 11/19/78
 TWINS ONLY AVG TWIN AREA 36 X 133
 QTM OUTPUT DIVIDED 133
 DISREGARD AFETA (VERSION 2)

MAG-803.0 UNITS-MM CAL. FACTOR- 0.100375 INITS/PS
 FRAME AREA- 0.173313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
2	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
3	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
5	0.44	6.321	SSSSSSSSSS	31.250	0.035	1.0000002
6	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
7	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
8	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
9	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
10	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
11	16.28	231.506	7.813	3.125	1.376	1.000014
12	12.81	182.123	5.515	2.641	1.453	1.000011
13	0.47	6.716	93.750	62.500	1.032	1.000001
14	14.00	199.111	6.596	1.974	1.539	0.000006
15	15.81	224.790	11.719	2.930	1.352	0.000008
16	4.86	69.136	18.750	5.859	1.187	1.000004
17	1.72	24.494	93.750	26.786	1.043	0.000009
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
19	18.97	269.827	5.515	1.974	1.579	1.000007
20	2.44	34.765	46.875	11.719	0.391	0.000003
21	10.64	151.309	31.250	5.068	1.224	0.000009
22	20.03	284.840	4.688	1.369	0.808	1.000007
23	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
24	6.64	94.420	11.719	2.885	0.365	0.000002
25	6.97	99.163	12.500	6.944	0.179	0.000009
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	5.28	75.141	SSSSSSSSSS	SSSSSSSSSS	0.170	SSSSSSSSSSSSSS
SD	6.86	97.579	SSSSSSSSSS	SSSSSSSSSS	1.027	SSSSSSSSSSSSSS
SE	1.37	19.516	SSSSSSSSSS	SSSSSSSSSS	1.045	SSSSSSSSSSSSSS

26	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
27	1.53	21.728	SSSSSSSSSS	31.250	0.035	1.000000
28	13.14	186.864	5.944	2.155	0.517	1.000006
29	1.44	20.543	187.500	11.250	0.035	0.000007
30	4.53	64.395	62.500	10.417	1.104	1.000003
31	13.56	192.790	13.393	3.989	1.280	1.000009
32	10.75	152.889	17.045	4.808	1.232	1.000009
33	14.36	204.247	18.750	3.289	1.325	1.000008
34	20.61	293.136	8.929	2.500	1.435	1.000010
35	24.97	355.160	7.500	1.603	0.672	0.000008
36	19.58	278.519	9.375	2.930	0.381	0.000010
37	46.81	694.123	4.076	1.442	0.773	1.000021
38	48.08	683.852	5.208	1.267	1.864	1.000014
39	23.56	335.712	4.808	2.107	0.547	0.000008
40	19.08	271.407	6.250	2.757	1.421	1.000008
41	43.67	621.037	5.208	1.875	0.605	0.000016
42	13.61	193.580	10.417	3.606	0.312	1.000009
43	28.81	409.679	5.208	1.820	1.621	1.000010
44	32.06	455.901	6.048	1.645	0.572	0.000010
45	27.03	384.395	6.250	2.083	1.539	1.000011
46	31.11	442.469	7.500	2.344	1.475	1.000012
47	22.06	313.679	9.375	2.930	0.384	1.000012
48	21.25	302.222	8.929	1.125	1.363	1.000010
49	21.25	302.222	8.152	2.534	1.443	1.000011
50	19.81	281.679	15.625	2.930	1.368	1.000009
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	13.13	186.801	SSSSSSSSSS	SSSSSSSSSS	1.293	SSSSSSSSSSSSSS
SD	12.98	184.633	SSSSSSSSSS	SSSSSSSSSS	0.255	SSSSSSSSSSSSSS
SE	1.84	26.111	SSSSSSSSSS	SSSSSSSSSS	1.036	SSSSSSSSSSSSSS

MOBIL TYCO SAMPLE # 1
 DISLOCATION PHYS ONLY AVG DISL PIT AREA 4.74 PD 11/15/78
 VERSION 2 (IGNORE AFETA)
 2.5 MM X & Y STEPS (17.5 X 21 MM MATRIX)

not use time data
 at center in sample
 1 turn would at edge

MAG-800.3 UNITS-MICRONS CAL. FACTOR- 1.175077 UNITS/PO
 FRAME AREA- 3.515525000 34

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.001	SSSSSSSSSSSSSS
2	848.96	0.024	52.433	52.521	1.032	1.775490
3	6.42	0.000	4261.364	5514.706	0.000	1.863839
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
5	5.82	0.000	4687.500	5514.706	1.000	1.371094
6	814.33	0.023	55.737	50.731	1.031	1.889778
7	19.70	0.001	1704.545	1616.779	1.001	1.237504
8	738.81	0.021	63.516	65.697	1.025	2.252731
9	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
10	268.36	0.008	133.929	153.941	1.012	1.652574
11	20.90	0.001	1674.107	1442.308	0.001	1.036184
12	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
13	157.61	0.004	261.872	261.872	0.006	1.687500
14	164.63	0.005	287.577	272.529	0.006	2.124786
15	296.27	0.008	159.983	147.174	0.011	2.022758
16	406.57	0.012	99.947	100.375	0.017	1.526145
17	10.75	0.000	2757.353	1913.265	0.001	1.265625
18	64.78	0.002	561.377	575.153	0.003	1.298537
19	3.13	0.000	18750.000	7812.500	1.000	1.476563
20	59.40	0.002	704.887	633.446	0.002	1.435096
21	176.42	0.005	222.684	211.149	0.008	1.373709
22	835.37	0.024	48.752	41.909	0.038	1.352368
23	360.00	0.010	107.635	101.571	0.016	1.333147
24	1.19	0.000	23437.500	18750.000	0.000	1.125000
25	405.97	0.012	99.311	101.571	0.017	1.787383
26	204.03	0.006	211.149	201.180	0.008	1.671603
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	225.75	0.006	SSSSSSSSSS	SSSSSSSSSS	0.009	SSSSSSSSSSSSSS
SD	281.17	0.008	SSSSSSSSSS	SSSSSSSSSS	1.011	SSSSSSSSSSSSSS
SE	55.14	0.002	SSSSSSSSSS	SSSSSSSSSS	0.002	SSSSSSSSSSSSSS
27	84.63	0.002	430.046	444.113	0.004	1.190065
28	60.15	0.002	1065.141	326.655	1.003	2.023996
LAST FIELD DELETED						
28	325.52	0.009	116.027	103.821	0.016	1.277930
29	1172.39	0.033	33.458	30.350	0.054	1.326762
30	343.58	0.010	117.925	125.167	0.014	1.619541
31	11.74	1.000	4076.187	4261.364	1.000	2.191057
32	521.61	0.015	81.022	11.617	0.021	1.445977
33	178.21	0.005	223.214	215.023	0.008	1.435096
34	20.15	0.001	1616.379	1674.107	1.001	1.265625
35	134.78	0.004	400.641	360.577	0.004	2.645508
36	587.81	0.017	67.108	67.592	0.025	1.436567
37	862.39	0.025	44.473	44.243	0.038	1.408200
38	239.40	0.007	172.970	173.299	0.010	1.464692
39	14.48	0.000	1913.265	2083.333	1.001	1.136719
40	411.04	0.012	121.281	104.632	0.015	2.139675
41	49.40	0.001	860.192	860.192	0.002	1.662388
42	9.40	0.000	4464.286	7211.538	0.000	4.429610
43	60.45	0.002	625.000	750.000	0.003	1.539274
44	1115.22	0.032	38.740	36.535	0.042	1.811638
45	303.13	0.009	138.479	143.786	0.012	1.674547
46	270.75	0.008	162.197	161.082	0.010	1.735332
47	4.48	0.000	9375.000	11718.750	1.000	4.218750
48	162.09	0.005	296.677	302.419	0.006	2.213315
49	51.04	0.001	768.443	1157.407	0.002	2.474688
50	13.28	0.000	1875.000	2083.333	0.001	1.893977
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	256.28	0.007	SSSSSSSSSS	SSSSSSSSSS	0.010	SSSSSSSSSSSSSS
SD	309.28	0.009	SSSSSSSSSS	SSSSSSSSSS	0.013	SSSSSSSSSSSSSS
SE	43.74	0.001	SSSSSSSSSS	SSSSSSSSSS	0.002	SSSSSSSSSSSSSS

MOBIL TYCO SAMPLE #5 11/19/78
 TWINS ONLY AVG TWIN ONLY (AREA) 29.8 X 100
 JTM OUTPUT DIVIDED BY 100
 DISREGARD AFETA (VERSION 2)

MAG-807.0 UNITS-MM CAL. FACTOR- 1.100375 UNITS/PP
 FRAME AREA- 0.070313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
2	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
3	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
5	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
6	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
7	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.100	SSSSSSSSSSSSSS
8	0.77	10.977	187.500	31.250	1.035	0.000003
9	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
10	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
11	1.34	19.290	187.500	31.250	1.035	1.000006
12	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
13	1.01	14.018	62.500	31.250	0.037	1.000002
14	0.10	1.432	SSSSSSSSSS	SSSSSSSSSS	1.003	1.000000
15	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
16	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
17	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
19	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
20	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
21	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
22	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
23	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
24	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
25	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	0.13	1.833	SSSSSSSSSS	SSSSSSSSSS	1.004	SSSSSSSSSSSSSS
SD	0.35	4.932	SSSSSSSSSS	SSSSSSSSSS	1.012	SSSSSSSSSSSSSS
SE	0.07	0.936	SSSSSSSSSS	SSSSSSSSSS	1.102	SSSSSSSSSSSSSS
26	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
27	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
28	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
29	21.41	304.489	7.500	1.953	1.557	0.000006
30	2.42	34.362	23.438	7.813	1.152	1.000003
31	3.36	47.726	17.045	7.813	1.152	1.111114
32	10.91	155.178	9.968	2.259	1.400	1.111114
33	7.31	11.454	23.750	37.500	1.132	1.111112
34	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
35	0.10	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
37	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
38	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
39	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
40	62.58	890.082	5.515	2.315	1.500	1.000029
41	4.87	69.202	20.833	8.929	0.115	1.000004
42	95.17	1353.497	1.913	0.605	1.832	1.000013
43	115.91	1648.441	1.389	1.022	1.597	0.000069
44	119.43	1698.553	2.180	1.130	1.107	1.000042
45	69.26	985.056	1.500	1.536	2.080	1.000011
46	93.39	1328.203	1.589	1.778	1.544	1.000018
47	77.75	1105.802	1.399	1.602	1.779	1.000012
48	20.77	295.421	18.750	7.212	0.173	0.000015
49	9.16	130.291	7.813	1.538	0.336	0.000005
50	20.40	290.172	11.029	3.906	1.301	1.000017
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	14.62	237.874	SSSSSSSSSS	SSSSSSSSSS	1.257	SSSSSSSSSSSSSS
SD	31.97	454.700	SSSSSSSSSS	SSSSSSSSSS	1.544	SSSSSSSSSSSSSS
SE	4.52	64.304	SSSSSSSSSS	SSSSSSSSSS	1.077	SSSSSSSSSSSSSS

031L TYCO SAMPLE #5 11/15/78
 DISLOCATIONS PITS ONLY AVG DISL AREA 1.0173
 VERSION 2 (IGW015 AFETA)
 2.5MM X & Y STEPS (17.5 X 23 MM MATRIX)

MAG-800.3 INITS-MICRONS CAL. FACTOR- 1.375370 INITS/PP
 FRAME AREA- 3.515625000 34

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	843.85	0.024	48.176	52.141	0.933	1.859375
2	18.81	0.001	3125.100	2678.571	1.001	2.285156
3	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.107	SSSSSSSSSSSSSS
4	98.26	0.003	322.165	366.211	1.005	1.404192
5	184.37	0.005	183.135	197.785	1.009	1.279688
6	611.43	0.017	69.188	78.649	1.023	1.987092
7	521.85	0.015	82.891	86.406	1.019	1.928113
8	71.29	0.002	575.153	660.211	1.003	2.231855
9	10.85	0.000	3472.222	3750.000	1.000	2.109375
10	271.64	0.008	182.749	193.299	0.999	2.399574
11	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
12	552.97	0.016	71.131	75.911	1.022	1.821451
13	314.33	0.009	128.601	137.161	0.913	1.669957
14	684.28	0.019	64.566	71.894	1.024	2.357214
15	763.97	0.022	60.484	65.697	1.026	2.305464
16	211.72	0.006	194.099	188.253	0.909	1.788995
17	796.09	0.023	56.991	44.410	1.134	1.799019
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
19	1131.98	0.032	41.372	44.579	1.138	2.989046
20	298.70	0.008	131.487	143.130	1.012	1.922185
21	672.50	0.019	70.436	77.034	0.922	1.111830
22	228.94	0.007	169.837	172.335	0.910	1.463613
23	22.00	0.001	1704.545	1994.481	0.991	1.943182
24	251.90	0.001	1320.423	1217.532	1.001	0.992292
25	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
26	1052.53	0.033	41.310	43.763	1.039	2.157733

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	361.08	0.010	SSSSSSSSSS	SSSSSSSSSS	1.013	SSSSSSSSSSSSSS
SD	351.40	0.013	SSSSSSSSSS	SSSSSSSSSS	1.013	SSSSSSSSSSSSSS
SE	68.91	0.002	SSSSSSSSSS	SSSSSSSSSS	1.101	SSSSSSSSSSSSSS

27	354.41	0.010	132.793	136.163	1.112	2.265720
28	357.72	1.117	95.949	112.137	1.116	1.416778
29	399.28	0.011	95.649	97.453	1.017	1.551938
30	5.50	0.000	4934.211	6250.000	1.000	1.315930
31	92.47	0.003	369.394	457.117	1.004	1.720765
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
33	830.54	0.024	47.783	52.404	1.033	1.872499
34	19.25	0.001	1644.737	1913.265	0.901	1.168945
35	935.89	0.027	52.170	56.818	1.030	2.833090
36	665.99	0.019	74.464	72.227	1.022	2.707767
37	111.43	0.003	337.230	323.276	1.005	1.273897
38	244.57	0.007	193.299	204.248	0.908	2.425064
39	268.74	0.008	142.477	144.676	0.912	1.411571
40	1470.77	0.042	30.038	30.697	0.956	2.120433
41	359.04	0.010	129.038	113.636	0.914	1.885895
42	539.94	0.015	73.994	80.197	1.022	1.737324
43	523.73	0.015	82.526	87.499	1.020	1.906774
44	7.09	0.000	4464.286	3472.222	1.000	1.984375
45	248.48	0.007	178.765	180.985	1.009	2.155831
46	186.98	0.005	235.553	251.340	1.007	2.299802
47	2.75	0.000	11718.750	11718.750	1.000	1.315938
48	942.84	0.027	46.182	50.722	1.034	2.218334
49	679.31	0.019	59.942	46.679	1.027	1.838594
50	754.70	0.021	55.572	63.819	0.927	2.242689

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	387.77	0.011	SSSSSSSSSS	SSSSSSSSSS	1.015	SSSSSSSSSSSSSS
SD	361.43	0.010	SSSSSSSSSS	SSSSSSSSSS	1.013	SSSSSSSSSSSSSS
SE	51.11	0.001	SSSSSSSSSS	SSSSSSSSSS	1.102	SSSSSSSSSSSSSS

MOBIL TYCO SAMPLE #6 11/13/78
 TWINS ONLY (VERSION 2)
 DISREGARD AFETA FROM OUTPUT DIVIDED by 100
 AVG TWIN AREA 34.6 X 133

MAG-800.0 UNITS-MM CAL. FACTOR- 3.000375 UNITS/PP
 FRAME AREA- 3.879313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 7.000000
2	0.00	1.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
3	0.00	0.100	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
4	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100 SSSSSSSSSSS
5	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
6	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
7	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
8	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
9	3.47	49.326	23.438	7.212	0.157 SSSSSSSSSSS
10	0.84	11.920	93.750	31.250	1.037 7.000001
11	2.25	32.062	46.875	8.523	0.131 7.000011
12	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 0.000000
13	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
14	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
15	0.30	0.100	SSSSSSSSSS	SSSSSSSSSS	0.100 SSSSSSSSSSS
16	0.10	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000 SSSSSSSSSSS
17	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
19	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000 SSSSSSSSSSS
20	3.27	46.448	37.500	7.813	1.136 SSSSSSSSSSS
21	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000 0.000000
22	0.26	3.699	93.750	62.500	0.029 SSSSSSSSSSS
23	3.76	53.436	52.500	7.500	1.139 1.000018
24	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 1.000000
25	0.00	0.100	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	0.55	7.875	SSSSSSSSSS	SSSSSSSSSS	1.751 SSSSSSSSSSS
SE	1.18	16.827	SSSSSSSSSS	SSSSSSSSSS	0.179 SSSSSSSSSSS
	0.24	3.365	SSSSSSSSSS	SSSSSSSSSS	1.722 SSSSSSSSSSS
26	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100 SSSSSSSSSSS
27	0.30	0.100	SSSSSSSSSS	SSSSSSSSSS	1.100 SSSSSSSSSSS
28	24.63	353.189	11.029	5.357	1.245 1.100040
29	0.26	3.699	187.500	187.500	0.011 1.000001
LAST FIELD DELETED					
29	0.30	0.100	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
30	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
31	1.36	19.319	187.500	11.250	1.735 1.100007
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100 SSSSSSSSSSS
33	5.06	71.933	62.500	8.929	1.117 1.100008
34	0.10	0.000	SSSSSSSSSS	SSSSSSSSSS	0.100 SSSSSSSSSSS
35	1.59	22.608	187.500	11.250	0.035 1.000000
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000 SSSSSSSSSSS
37	7.92	112.627	15.625	9.375	0.139 1.000013
38	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
39	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000 SSSSSSSSSSS
40	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
41	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
42	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
43	4.88	69.467	12.500	6.944	0.179 1.000008
44	1.37	15.209	62.500	11.250	1.040 1.000003
45	3.21	45.626	23.438	18.750	0.777 1.000016
46	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
47	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000 SSSSSSSSSSS
48	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000 SSSSSSSSSSS
49	0.98	13.976	93.750	11.250	1.037 1.000005
50	0.10	0.100	SSSSSSSSSS	SSSSSSSSSS	1.100 SSSSSSSSSSS
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	1.29	18.415	SSSSSSSSSS	SSSSSSSSSS	0.044 SSSSSSSSSSS
SE	3.75	53.371	SSSSSSSSSS	SSSSSSSSSS	0.090 SSSSSSSSSSS
	0.53	7.548	SSSSSSSSSS	SSSSSSSSSS	1.313 SSSSSSSSSSS

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	48.91	1.111	884.434	1.110.165	1.112	1.521933
2	166.93	0.118	194.131	219.127	1.118	2.119150
3	417.42	0.112	133.739	131.471	1.112	1.391441
4	433.17	0.112	113.716	111.617	1.115	1.631445
5	1692.13	0.108	14.761	38.144	1.144	4.324345
6	53.92	1.111	1184.739	1576.205	1.111	4.375111
7	371.15	1.111	111.309	151.417	1.111	2.159105
8	487.58	1.119	71.731	61.916	1.122	1.949130
9	91.62	0.113	529.441	613.446	1.113	1.874143
10	987.63	0.128	56.273	61.536	1.128	2.537823
11	735.36	0.129	83.138	91.755	1.129	1.321185
12	595.98	0.017	73.733	61.787	1.121	1.774359
13	1337.54	0.137	47.316	52.757	1.133	1.696323
14	127.64	0.104	416.667	459.559	1.104	2.186842
15	43.89	0.101	946.973	1065.341	1.102	1.417167
16	834.69	0.123	68.431	77.169	1.123	2.578483
17	113.22	0.103	459.559	496.032	0.103	1.713542
18	276.55	0.108	153.941	177.557	1.110	1.799782
19	525.13	0.115	102.347	113.655	1.116	2.422304
20	765.49	0.122	69.911	76.856	1.123	1.380238
21	34.17	0.101	1358.696	1442.308	0.101	1.912509
22	529.15	0.115	104.866	123.355	1.114	2.776465
23	678.69	0.119	97.962	104.951	0.115	4.850987
24	258.46	0.107	193.299	197.368	0.108	1.838851
25	26.80	0.101	1464.844	1420.455	0.101	1.383529

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
472.93	0.113	358.719	395.106	1.114	2.394184
SD 413.45	0.112	435.308	479.952	1.111	3.985660
SE 82.69	0.102	87.062	95.990	1.102	1.161132

26	269.01	0.108	159.983	152.936	1.110	1.672917
27	189.95	0.105	247.361	249.335	0.106	1.619795
28	990.95	0.108	55.245	55.979	0.108	2.929157
29	324.62	0.109	144.809	169.224	1.111	2.896394
30	322.28	0.109	149.046	168.919	0.110	2.236954
31	577.72	0.116	97.251	107.511	0.116	2.975556
32	278.18	0.108	177.557	205.142	1.109	2.062074
33	53.43	0.102	852.273	1143.293	0.102	1.794375
34	336.85	0.110	112.007	121.124	1.115	1.087680
35	98.62	0.113	438.984	483.247	1.114	1.188721
36	630.82	0.118	82.891	88.277	1.119	2.322780
37	274.54	0.108	178.232	204.694	1.119	1.953257
38	165.33	0.105	300.481	330.106	1.115	2.201125
39	796.31	1.123	72.141	79.517	1.121	2.012156
40	41.54	1.111	1377.586	1157.417	1.111	1.595227
41	239.74	0.117	161.638	182.749	1.119	1.379318
42	2035.68	0.108	21.581	24.420	0.111	1.670592
43	579.73	0.116	86.326	82.891	1.122	1.892674
44	674.71	1.119	88.277	132.459	1.117	1.631313
45	571.86	1.116	95.371	135.456	1.114	2.452452
46	182.24	1.115	246.335	277.367	1.114	1.251111
47	2373.87	1.159	11.857	35.951	1.146	4.261155
48	352.39	0.110	113.636	133.357	1.114	1.414724
49	38.69	0.101	801.282	913.194	0.102	1.984375
50	359.13	0.112	113.499	129.848	1.114	1.478732
51	562.48	0.116	91.642	93.844	0.118	2.033927

LAST FIELD DELETED

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
485.30	0.114	297.856	313.179	0.114	2.269490
SD 468.33	0.113	366.304	410.784	1.113	1.914661
SE 66.23	0.102	51.803	58.094	1.102	1.122753

SAMPLE WILL NOW BE RERUN. HOWEVER, NOW WE WILL TAKE ONLY 8
 FIELDS (FIELDS) ACROSS THE MIDDLE OF THE SAMPLE. THIS IS A
 TEST FOR VERTICAL SYMMETRY.

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	258.46	0.007	158.898	174.581	1.110	1.373319
2	376.72	0.011	124.834	138.683	0.113	1.893806
3	95.31	0.103	395.579	387.397	1.104	1.290575
4	436.68	0.112	117.833	101.902	1.116	1.593954
5	587.77	0.017	82.891	89.542	1.119	2.198774
6	557.79	0.116	131.681	81.451	1.118	2.631563
7	443.37	0.113	112.141	122.873	1.114	1.987651
8	231.16	0.007	195.723	231.481	1.108	1.830778

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
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COAL TYCO SAMPLE #7

1/14/78

TWINS ONLY

AVG TWIN AREA 27.4 X 131

DISREGARD AREA (VERTICAL)

ITEM OUTPUT DIVIDED BY 100

MAG-B002-2 UNITS-MM CAL. FACTOR-

0.070313

FRAME AREA-

FIELD NO. NO./AREA MFPV MFPH L/A

1 2.26 117.826 15.625 9.523

2 13.25 188.418 8.152 3.676

3 1.06 15.053 93.750 31.250

4 0.47 6.748 187.500 46.875

5 7.00 7.000 0.000 0.000

6 0.51 7.267 187.500 37.500

7 0.11 1.557 0.000 0.000

8 0.00 0.000 0.000 0.000

9 0.00 0.000 0.000 0.000

10 0.00 0.000 0.000 0.000

11 0.00 0.000 0.000 0.000

12 0.00 0.000 0.000 0.000

13 0.00 0.000 0.000 0.000

14 0.00 0.000 0.000 0.000

15 0.00 0.000 0.000 0.000

16 2.48 35.296 37.500 13.393

17 7.15 101.736 8.152 5.682

18 4.45 63.325 14.423 4.934

19 0.00 0.000 0.000 0.000

20 5.95 84.607 17.045 5.859

21 20.40 290.154 8.906 2.155

22 30.77 437.567 5.357 2.131

23 1.72 24.396 18.750 15.625

24 8.83 125.612 5.357 3.827

25 96.35 1370.316 4.076 1.550

26 146.39 233.058 7.500 2.202

27 14.20 201.914 7.500 2.679

SE 3.62 51.491 0.000 0.000

SD 18.81 267.557 0.000 0.000

NO. NO./AREA MFPV MFPH L/A

8.61 122.402 0.000 0.000

0.00 0.000 0.000 0.000

39.31 559.127 3.125 1.114

22.92 325.949 2.157 0.731

0.00 0.000 0.000 0.000

39.31 559.127 3.125 1.114

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MOBIL TYCO SAMPLE # 7 11/17/78
 DISLOCATION PITS ONLY AVG DISL PIT AREA 6.29
 VERSION 2 (IGNORE AFETA)
 2.5 MM X & Y STEPS (17.5 X 27 MM MATRIX)
 MAG=800.0 UNITS-MICRONS CAL. FACTOR= 1.375000 UNITS/PP
 FRAME AREA= 3.515625000 04

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	111.92	0.003	375.390	411.184	0.004	1.329000
2	216.53	0.006	183.195	217.517	0.009	1.496338
3	411.61	0.012	115.456	114.469	0.013	1.339801
4	222.26	0.006	204.694	239.770	0.007	2.524433
5	1.27	0.000	46875.000	SSSSSSSSSS	0.000	1.125000
6	7.79	0.000	4976.087	4261.364	0.000	1.378125
7	574.09	0.016	88.778	103.135	0.018	1.686756
8	755.33	0.021	78.125	86.009	0.019	4.514253
9	1321.30	0.038	40.167	42.750	0.038	1.075617
10	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
11	39.43	0.001	844.595	837.454	0.002	1.341346
12	141.49	0.004	235.553	248.016	0.007	1.840533
13	14.79	0.000	2467.105	2678.571	0.001	1.006010
14	12.88	0.000	3605.769	3125.100	0.000	1.898438
15	1540.54	0.044	35.391	41.227	0.042	4.167144
16	485.53	0.014	107.265	122.370	0.014	2.788758
17	3687.44	0.105	17.573	16.265	0.093	4.419588
18	59.30	0.002	679.348	684.307	0.003	1.279345
19	127.50	0.004	348.513	339.674	0.005	1.911547
20	44.52	0.001	710.227	904.442	0.002	1.312500
21	6.27	0.000	6250.000	5514.706	0.000	1.371094
22	68.20	0.002	655.594	694.444	0.002	1.828125
23	736.80	0.021	70.489	79.181	0.022	2.871352
24	739.43	0.021	64.212	77.865	0.024	2.505927
25	2136.25	0.061	60.367	36.507	0.040	6.036991
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	538.50	0.015	SSSSSSSSSS	SSSSSSSSSS	0.015	SSSSSSSSSSSSSS
SE	638.63	0.024	SSSSSSSSSS	SSSSSSSSSS	0.020	SSSSSSSSSSSSSS
SE	167.73	0.005	SSSSSSSSSS	SSSSSSSSSS	0.004	SSSSSSSSSSSSSS
26	212.08	0.006	207.412	200.749	0.008	1.432011
27	1.43	0.000	18750.000	31250.000	0.000	1.265625
28	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
29	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
30	356.60	0.010	109.312	120.347	0.014	1.762044
31	943.88	0.027	50.054	61.881	0.029	2.859214
32	444.20	0.013	106.172	124.337	0.014	2.271134
33	1947.22	0.055	25.587	27.182	0.060	2.939236
34	1372.66	0.039	40.514	44.964	0.038	1.753644
35	240.36	0.007	193.698	203.362	0.008	2.144886
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
37	0.00	0.000	31250.000	46875.000	0.000	0.000000
38	296.66	0.008	152.936	173.290	0.010	2.150871
39	965.34	0.027	52.609	60.289	0.029	2.914249
40	721.14	0.021	60.758	69.342	0.026	1.817308
41	556.44	0.016	87.291	98.065	0.018	2.366286
42	804.29	0.023	53.116	59.904	0.023	1.627968
43	152.31	0.004	295.741	325.521	0.005	2.010728
44	19.87	0.001	1442.308	1050.371	0.001	1.757813
45	25.76	0.001	1102.941	750.000	0.001	1.199713
46	123.37	0.004	338.448	373.506	0.005	1.417208
47	406.84	0.012	106.393	122.709	0.015	1.681586
48	785.53	0.022	59.398	63.359	0.027	1.867818
49	316.69	0.009	123.681	139.925	0.012	1.794236
50	1134.98	0.032	37.394	40.347	0.044	1.539757
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
SD	505.80	0.014	SSSSSSSSSS	SSSSSSSSSS	0.015	SSSSSSSSSSSSSS
SE	689.38	0.020	SSSSSSSSSS	SSSSSSSSSS	0.018	SSSSSSSSSSSSSS
SE	97.45	0.003	SSSSSSSSSS	SSSSSSSSSS	0.003	SSSSSSSSSSSSSS

ORIGINAL PAGE IS
 OF POOR QUALITY

081L TYCO SAMPLE #8 11/19/78
 TWINS ONLY (VERSION 2)
 DISREGARD AFETA
 JTM OUTPUT DIVIDED BY 100
 AVG TWIN AREA 25.5 X 100

MAG-800.3 UNITS-MM CAL. FACTOR- 0.000375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	56.78	797.560	4.167	1.872	1.243
2	31.73	451.207	4.076	1.267	3.941
3	86.90	1235.939	3.606	7.788	1.179
4	47.37	673.743	6.944	1.365	1.395
5	90.78	1291.155	4.076	1.371	1.037
6	5.02	71.390	31.250	7.500	2.152
7	4.90	69.717	93.750	10.417	2.104
8	8.82	125.490	31.250	4.376	2.256
9	10.98	156.166	8.929	2.799	0.405
10	112.35	1597.908	1.389	0.437	2.613
11	142.51	2226.806	1.689	7.781	1.568
12	112.31	1597.351	4.167	0.625	1.712
13	27.06	384.237	20.833	8.152	2.147
14	0.94	13.386	187.500	31.250	0.335
15	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
16	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
17	2.12	30.118	23.438	20.833	2.788
18	5.02	71.390	26.786	7.212	0.157
19	16.63	236.479	23.438	8.750	2.285
20	20.24	287.791	17.045	2.916	0.520
21	2.12	30.118	187.500	12.500	2.085
22	1.73	24.540	62.500	20.833	0.064
23	6.51	92.584	62.500	9.375	0.117
24	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
25	4.43	63.024	31.250	11.719	0.101
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
31.86	453.148	SSSSSSSSSS	SSSSSSSSSS	3.561	SSSSSSSSSSSS
SD 42.01	597.482	SSSSSSSSSS	SSSSSSSSSS	5.678	SSSSSSSSSSSS
SE 8.40	119.496	SSSSSSSSSS	SSSSSSSSSS	2.136	SSSSSSSSSSSS
26	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
27	5.49	78.083	187.500	31.250	0.035
28	30.04	427.224	9.375	1.276	0.824
29	0.59	8.366	SSSSSSSSSS	31.250	0.332
30	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
31	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
33	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
34	3.22	45.734	26.786	11.329	0.104
35	0.12	1.673	SSSSSSSSSS	SSSSSSSSSS	0.000
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
37	0.82	11.712	62.500	62.500	0.335
38	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
39	0.31	4.462	SSSSSSSSSS	62.500	0.013
40	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
41	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
42	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
44	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
45	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
46	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
47	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
48	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
49	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
50	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
16.74	238.119	SSSSSSSSSS	SSSSSSSSSS	2.301	SSSSSSSSSSSS
SD 33.59	477.789	SSSSSSSSSS	SSSSSSSSSS	2.557	SSSSSSSSSSSS
SE 4.75	67.570	SSSSSSSSSS	SSSSSSSSSS	0.379	SSSSSSSSSSSS

DISLOC TPO SAMPLE # 6 11/17/79
 DISLOCATION PITS ONLY AVG DISL PIT AREA 1.71
 VERSION 2 (IGNORE AFETA)
 2.5 MM X 4 Y STEPS (17.5 X 20 MM AFFIX)

MAG-833.3 UNITS-MICRONS CAL. FACTOR- 3.375333 UNITS/PP
 FRAME AREA- 3.515625000 04

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	10.40	0.000	5514.706	5514.706	1.000	1.378125
2	17.41	0.000	2467.105	2403.846	1.001	1.768750
3	53.29	0.002	876.168	976.563	1.002	1.260603
4	6573.70	0.187	13.420	14.049	0.115	4.262549
5	10.62	0.000	4464.286	4261.364	1.000	1.406250
6	100.40	0.003	393.908	485.751	1.004	1.889407
7	1029.94	0.029	51.511	65.422	0.029	1.701177
8	822.29	0.023	62.583	73.619	0.025	1.403713
9	9.98	0.000	5514.706	5208.333	1.000	1.652344
10	19.53	0.001	2403.846	2343.750	0.001	1.808594
11	62.63	0.002	837.054	781.250	1.002	1.185268
12	2140.76	0.061	35.471	34.341	0.047	2.758603
13	542.89	0.015	96.055	108.507	0.017	1.393714
14	26.33	0.001	1442.398	1320.423	0.001	0.670673
15	683.44	0.019	63.387	76.344	0.023	1.075230
16	170.70	0.005	292.056	312.500	0.006	1.226947
17	74.31	0.002	901.442	837.154	0.002	1.822917
18	1.91	0.000	10416.667	10416.667	0.000	1.316406
19	0.00	0.000	55555555	55555555	0.000	55555555
20	368.58	0.010	130.936	150.723	0.012	1.214552
21	134.61	0.004	331.272	376.506	1.005	1.061384
22	80.69	0.002	541.908	629.195	0.003	1.010908
23	126.39	0.006	271.739	303.398	0.006	1.354980
24	39.07	0.001	1129.518	1266.892	0.002	0.892241
25	59.66	0.002	910.194	976.563	0.002	1.411272
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	529.19	0.015	55555555	55555555	0.012	55555555
SD	1319.28	0.138	55555555	55555555	1.324	55555555
SE	263.86	0.008	55555555	55555555	1.105	55555555
26	14.44	0.000	3125.000	3348.214	0.001	1.362597
27	0.00	0.000	55555555	55555555	1.000	55555555
28	1517.83	0.043	41.336	45.454	0.039	1.558966
29	329.33	0.009	158.361	183.636	0.010	1.389372
30	92.14	0.003	504.132	597.134	0.003	1.317188
31	331.63	0.009	179.942	199.937	0.009	1.664063
32	47.35	0.001	1030.220	1217.532	0.002	1.206137
33	200.42	0.006	288.462	347.222	0.005	1.981343
34	1.27	0.000	18750.000	31250.000	0.000	1.843750
35	1342.89	0.038	55.147	64.789	0.027	1.543638
36	3309.77	0.094	22.477	24.433	0.069	1.172106
37	1051.59	0.030	51.426	61.395	0.030	1.638860
38	274.52	0.008	192.901	216.513	0.008	1.431718
39	151.59	0.004	402.361	432.328	0.004	1.731142
40	69.64	0.002	704.887	808.190	0.002	1.317857
41	177.90	0.005	289.352	304.383	0.006	1.253657
42	0.00	0.000	55555555	55555555	0.000	55555555
43	763.06	0.022	77.097	86.725	0.020	1.914416
44	397.45	0.011	143.130	149.283	0.011	1.548529
45	472.82	0.013	118.671	133.357	0.010	1.639643
46	341.83	0.010	146.810	184.547	0.010	1.583260
47	92.14	0.003	829.546	744.048	0.002	2.653533
48	503.61	0.014	133.168	146.084	0.012	1.316406
49	46.37	0.001	1116.071	1233.553	0.001	1.453125
50	13.16	0.000	4261.364	5859.175	0.000	1.453125
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	495.44	0.014	55555555	55555555	0.012	55555555
SD	1059.79	0.030	55555555	55555555	0.020	55555555
SE	149.68	0.004	55555555	55555555	0.003	55555555

DATE 11/12/78
 MOJIL TYCO SAMPLE NO. 9
 TWINS ONLY (PROGRAM VERSION NO. 2)
 DISREGARD AVERAGE FEATURE AREA (AFETA)
 QTM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 36.87 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 0.000375 UNITS/PP
 FRAME AREA- 0.070313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	53.05	754.507	3.827	1.030	1.080	1.000015
2	51.13	727.119	4.368	1.194	0.931	0.000013
3	14.75	209.842	10.417	3.989	0.293	0.000013
4	8.03	114.179	23.438	5.682	0.189	1.000008
5	0.00	0.000	55555555	55555555	0.000	5555555555
6	55.71	792.309	4.464	1.500	0.755	0.000024
7	49.63	705.984	2.841	1.143	1.027	1.000014
8	23.81	338.679	8.929	2.155	0.507	0.000015
9	12.34	171.268	9.375	2.467	0.443	0.000006
10	9.03	128.451	13.393	5.208	0.221	0.000008
11	25.09	356.809	5.515	1.752	0.640	0.000009
12	33.44	475.617	5.068	1.563	0.712	0.000010
13	30.27	430.485	5.068	1.267	0.872	0.000009
14	21.35	303.577	6.048	1.410	0.763	0.000007
15	57.15	812.754	3.989	1.065	1.040	0.000015
16	36.78	523.763	2.344	1.379	0.861	0.000014
17	15.13	215.243	8.152	3.476	0.325	0.000010
18	0.00	0.000	55555555	55555555	0.000	5555555555
19	11.01	156.610	8.929	4.360	0.280	0.000008
20	7.21	102.607	17.045	5.515	0.200	0.000006
21	12.37	175.897	7.818	4.464	0.275	0.000011
22	7.46	106.078	13.393	5.859	0.200	0.000008
23	68.81	978.622	2.287	0.906	1.275	0.000016
24	6.29	89.492	10.417	5.682	0.221	0.000005
25	6.18	87.949	18.750	6.944	0.165	0.000008

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	24.63	350.282	55555555	55555555	1.531	5555555555
SE	23.77	285.404	55555555	55555555	1.766	5555555555
	4.01	57.181	55555555	55555555	1.073	5555555555

26	12.53	178.212	6.466	3.259	0.488	0.000005
27	6.70	95.276	11.719	4.696	0.187	0.000009
28	1.38	19.673	55555555	31.253	0.735	0.000007
29	2.98	42.431	46.875	14.423	0.077	0.000008
30	34.50	490.661	2.344	1.258	1.984	0.000010
31	32.98	469.059	3.024	1.150	0.997	0.000007
32	77.00	1095.115	1.630	0.588	1.949	0.000014
33	36.91	524.992	5.208	1.293	0.853	0.000011
34	6.54	92.963	20.833	7.212	0.160	0.000008
35	23.62	334.436	3.750	1.369	0.813	0.000006
36	0.00	0.000	55555555	55555555	0.000	5555555555
37	7.05	100.292	17.745	6.696	0.176	0.000012
38	47.63	677.359	3.989	2.344	0.531	0.000025
39	45.29	644.185	3.024	1.649	1.672	0.000008
40	62.90	894.530	2.500	0.915	1.275	0.000014
41	39.49	561.637	5.208	1.786	0.661	0.000016
42	57.39	816.225	3.641	1.700	1.528	0.000012
43	14.97	212.928	8.152	1.095	0.001	0.000006
44	00.07	1281.041	2.534	0.000	1.440	0.000019
45	48.11	684.302	4.160	1.320	0.861	0.000018
46	2.58	36.645	93.750	15.425	0.069	0.000007
47	54.92	781.123	3.989	1.258	0.920	0.000012
48	16.71	237.616	6.048	1.838	0.565	0.000008
49	24.38	346.780	8.929	0.930	0.389	0.000018
50	91.67	1303.800	2.155	0.702	1.627	0.000030

031L TYCO SAMPLE # 9 11/17/78
 DISLOCATION PIY(PITS) ONLY AVG DISL PIT AREA 5.79
 VERSION 2 (IGNORE AFETA)
 2.5 MM X 1 Y STEPS (17.5 X 21 MM MATRIX)

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	33.68	0.001	1116.771	1233.553	0.001	1.192255
2	273.58	0.008	160.256	163.143	1.011	1.318747
3	89.12	0.003	564.759	490.838	0.003	1.422794
4	3045.94	0.087	20.847	21.268	0.076	4.000101
5	17.27	0.000	2403.846	1802.885	1.001	1.937500
6	49.05	0.001	919.118	1090.116	1.001	1.736413
7	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSS
8	37.82	0.001	1019.022	966.495	1.002	0.933239
9	61.66	0.002	774.793	808.190	0.002	1.568848
10	200.86	0.006	236.146	216.513	0.007	1.409887
11	106.91	0.003	438.084	432.128	0.004	1.507818
12	3222.11	0.192	19.160	20.586	0.082	3.588919
13	144.39	0.004	359.195	244.141	0.005	1.588682
14	96.55	0.003	366.211	306.373	1.005	1.355334
15	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSS
16	1409.84	0.040	42.022	60.058	0.034	3.972148
17	222.28	0.006	206.044	224.282	0.008	1.615932
18	732.30	0.021	73.299	68.985	0.024	1.851748
19	55.79	0.002	787.815	822.368	0.002	1.335938
20	1307.94	0.037	33.967	35.892	0.048	1.584752
21	85.84	0.002	512.295	532.679	0.003	1.344050
22	105.31	0.003	384.221	366.211	0.004	1.676471
23	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSS
24	57.86	0.002	721.154	715.649	1.002	1.149009
25	120.03	0.003	373.506	418.527	0.004	1.503606
26	176.51	0.005	218.531	203.804	0.008	1.933239
27	2.25	0.000	23437.500	31250.000	1.000	1.828125

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	431.65	1.012	SSSSSSSSSS	SSSSSSSSSS	1.013	SSSSSSSSSSSS
SE	162.11	1.005	SSSSSSSSSS	SSSSSSSSSS	1.004	SSSSSSSSSSSS

28	2527.81	0.072	22.514	25.476	0.068	2.878584
29	313.99	0.009	176.887	189.777	0.009	2.345470
30	59.93	0.002	713.227	589.423	1.003	1.807292
31	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSS
32	53.78	0.001	1319.122	1217.532	1.002	2.167188
33	490.16	0.014	97.860	106.534	0.017	1.698271
34	46.46	0.001	1616.379	944.970	0.001	2.225184
35	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSS
36	1646.11	0.047	31.662	33.833	0.050	2.351398
37	271.85	0.008	176.554	173.297	0.009	1.844531
38	68.05	0.002	664.894	674.460	1.002	1.458759
39	22.45	0.001	1994.681	2757.353	0.001	2.031250
40	191.54	0.005	275.735	298.567	0.006	2.107475
41	144.04	0.004	305.375	336.122	0.005	1.466016
42	138.51	0.004	342.153	395.775	1.005	2.088542
43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSS
44	1696.20	0.048	29.528	30.788	0.053	2.079937
45	173.92	0.005	242.876	279.951	1.006	1.573438
46	47.84	0.001	1116.071	1512.097	0.001	2.596875
47	0.69	0.000	46875.000	46875.000	1.000	1.562500
48	186.18	0.005	254.755	282.380	0.006	1.918918
49	254.16	0.007	173.290	197.368	1.009	1.521025
50	64.77	0.002	625.000	612.745	1.003	1.098633

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	401.00	0.011	SSSSSSSSSS	SSSSSSSSSS	0.012	SSSSSSSSSSSS
SE	107.26	0.003	SSSSSSSSSS	SSSSSSSSSS	0.003	SSSSSSSSSSSS

DATE 11/12/78
 MOBIL TYCO SAMPLE NO. 13
 TWINS ONLY (PROGRAM VERSION NO. 2)
 DISREGARD AVERAGE FEATURE AREA (AFETA)
 9TM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 36.87 X 100 ← Disregard

ORIGINAL PAGE 13
 OF POOR QUALITY

DISREGARD ABOVE TWIN AREA
 NEW AVERAGE TWIN AREA = 29.35 X 100
 MAG-800.0 UNITS-MM CAL. FACTOR-
 FRAME AREA- 0.070313

1.000375 UNITS/PP

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
2	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
3	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
4	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
5	11.83	168.215	31.250	3.289	0.315	0.000005
6	0.59	8.337	187.500	31.250	0.735	0.000002
7	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
8	1.66	23.540	187.500	15.625	0.169	0.000003
9	2.55	36.291	93.750	15.625	0.069	0.000005
10	0.45	6.375	187.500	37.500	0.432	0.000002
11	0.24	3.433	187.500	187.500	0.008	0.000001
12	0.24	3.433	\$\$\$\$\$\$\$\$	187.500	0.008	0.000001
13	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
14	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
15	20.41	290.330	4.167	1.453	0.755	0.000005
16	106.50	1514.912	4.261	1.276	0.891	0.000029
17	77.21	1098.054	5.859	1.096	0.989	0.000017
18	29.83	424.215	3.906	1.090	1.000	0.000006
19	5.62	79.939	31.250	4.688	0.229	0.000005
20	101.00	1436.444	4.808	2.604	0.483	0.000082
21	111.28	1582.590	1.676	1.987	1.123	0.000024
22	118.93	1691.464	4.808	1.389	0.811	0.000030
23	89.41	1271.663	4.573	1.130	0.957	0.000019
24	8.83	125.548	12.500	4.160	0.253	0.000005
25	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	27.46	390.591	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.721	\$\$\$\$\$\$\$\$
SD	42.30	601.647	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.403	\$\$\$\$\$\$\$\$
SE	8.46	120.329	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.191	\$\$\$\$\$\$\$\$
26	15.66	222.651	10.417	4.167	0.272	0.000009
27	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
28	4.41	62.774	23.438	6.696	0.165	0.000004
29	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
30	1.21	17.165	187.500	31.250	0.335	0.000005
31	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
32	7.97	113.287	12.500	3.676	0.304	0.000003
33	9.07	128.981	20.833	5.859	0.189	0.000007
34	3.41	48.552	46.875	14.423	0.075	0.000007
35	39.38	560.061	2.805	1.187	0.944	0.000007
36	1.90	26.973	62.500	15.625	0.072	0.000004
37	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
38	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
39	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
40	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
41	6.69	95.142	20.833	4.261	0.253	0.000004
42	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
43	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
44	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
45	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
46	1.31	18.636	93.750	31.250	0.037	0.000005
47	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
48	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
49	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
50	12.31	175.080	7.212	3.409	0.384	0.000005
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	15.80	224.682	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.215	\$\$\$\$\$\$\$\$
SD	32.65	464.317	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.137	\$\$\$\$\$\$\$\$
SE	4.62	65.664	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.148	\$\$\$\$\$\$\$\$

DATE 11/18/78
MOBIL TYCO SAMPLE NO. 17
DISLOCATION PITS ONLY
VERSION 2, IGNORE AFETA
STEP 1.31 MM, ALONG TOP EDGE OF SAMPLE ONLY
AVERAGE PIT AREA = 5.67 μ^2
REPEAT AVERAGE PIT AREA = 5.67 μ^2

MAG-800.3 UNITS-MICRONS CAL. FACTOR-
FRAME AREA- 3.51562500 μ^2

3.375000 UNITS/PP

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	15.70	0.000	2840.939	3348.214	1.331	1.251563
2	43.39	0.001	1038.227	1233.553	1.301	1.823724
3	62.96	0.002	732.422	768.143	1.312	1.255178
4	53.62	0.002	876.168	946.970	1.332	1.379332
5	125.04	0.004	432.028	493.421	1.304	1.077148
6	43.74	0.001	1077.586	1102.941	1.302	1.453125
7	49.91	0.001	986.842	966.495	1.322	1.591875
8	1488.54	0.034	41.155	44.664	0.039	2.007779
9	181.83	0.005	250.668	243.506	1.336	1.526151
10	549.74	0.016	103.706	103.936	1.316	2.057879
11	537.57	0.015	89.885	99.734	1.017	1.896571
12	98.94	0.003	430.046	446.429	1.314	1.293289
13	221.87	0.006	213.554	233.791	1.337	1.684821
14	111.46	0.003	384.221	422.297	1.314	1.532128
15	14.81	0.000	2403.846	2843.909	1.301	1.181250
16	194.53	0.006	220.070	241.003	1.097	1.599066
17	3.70	0.000	11718.750	11718.750	0.000	1.476563
18	240.56	0.007	189.777	162.760	0.410	2.179688
19	843.74	0.024	61.435	59.866	1.327	2.020270
20	164.55	0.035	274.927	339.158	1.007	1.111891
21	656.08	0.019	59.411	62.542	0.026	1.282169
22	536.51	0.015	88.111	79.517	0.019	1.445207
23	384.13	0.011	91.642	98.477	1.017	1.063477
24	192.59	0.005	232.630	234.962	1.008	1.089396
25	0.00	0.000	55555555	55555555	1.000	5555555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	260.62	0.007	55555555	55555555	1.000	5555555555
SD	295.10	0.008	55555555	55555555	1.010	5555555555
SE	59.12	0.002	55555555	55555555	1.002	5555555555

26	0.00	0.000	55555555	55555555	0.000	5555555555
27	4.76	0.000	8522.727	8522.727	0.000	1.265625
28	28.92	0.001	2674.167	2678.571	1.331	1.843750
29	2.82	0.000	11718.750	11718.750	1.000	1.750000
30	262.18	0.007	318.878	226.998	1.336	1.943222
31	297.88	0.008	174.120	127.812	1.314	1.349521
32	338.98	0.007	157.563	171.733	0.313	1.274799
33	333.69	0.009	143.568	143.130	1.311	1.523357
34	687.83	0.024	76.593	88.443	1.321	1.845591
35	13.58	0.000	4464.286	2929.688	1.000	1.353516
36	0.00	0.000	55555555	55555555	0.000	5555555555
37	1.06	0.000	31250.000	46875.000	0.000	1.843750
38	30.86	0.001	1129.518	829.646	1.002	1.946514
39	274.25	0.008	149.760	152.439	1.312	1.156994
40	360.14	0.010	144.453	149.283	1.312	1.650323
41	40.39	0.001	997.143	1102.941	0.332	1.238582
42	102.65	0.003	436.047	395.570	1.004	1.221549
43	637.92	0.018	84.232	82.965	0.321	1.609622
44	17.11	0.000	2467.105	2183.233	1.001	1.136719
45	3537.92	0.101	13.273	14.621	1.119	1.785403
46	704.76	0.020	74.464	76.158	1.323	1.866902
47	0.00	0.000	55555555	55555555	0.000	5555555555
48	1.59	0.000	13392.857	18750.000	1.000	1.265625
49	0.00	0.000	55555555	55555555	1.000	5555555555
50	254.67	0.007	203.804	239.770	1.008	2.115234

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	286.99	0.008	55555555	55555555	1.010	5555555555
SD	534.06	0.015	55555555	55555555	1.018	5555555555
SE	75.53	0.002	55555555	55555555	1.003	5555555555

DATE 11/18/78
 MOBIL TCO SAMPLE NO. 13
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP .31 MM ALONG CENTERLINE ONLY
 AVERAGE PIT AREA = 5.57 μ^2

MAG-800.7 UNITS-MICRONS CAL. FACTOR-
 FRAME AREA- 3.515625000 34

1.375111 UNITS/ μ^2

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	43.21	0.001	715.649	829.646	1.000	3.748981
2	19.22	0.001	1758.868	1994.681	1.001	3.696733
3	65.08	0.002	651.342	759.000	1.002	1.482589
4	8.64	0.000	6696.429	4934.211	1.000	1.722656
5	23.81	0.001	1588.983	1536.885	0.001	3.949219
6	14.81	0.000	3024.194	3232.759	0.001	1.476563
7	64.22	0.002	768.443	801.282	1.002	1.546875
8	40.04	0.001	1143.293	1233.553	1.001	1.453994
9	27.51	0.001	1488.895	1704.545	1.001	1.462530
10	47.97	0.001	1053.371	1266.892	0.002	1.593750
11	191.71	0.005	274.123	297.619	0.006	1.934929
12	304.23	0.009	156.511	178.912	0.009	1.956275
13	173.54	0.005	255.450	307.377	0.006	1.590517
14	172.49	0.005	239.158	259.695	0.007	1.206414
15	60.85	0.002	801.282	801.282	0.002	1.617188
16	247.97	0.007	186.753	196.954	0.009	1.392386
17	0.00	0.000	5555555555	5555555555	0.000	5555555555
18	6.53	0.000	5859.375	535.714	0.000	1.040625
19	12.35	0.000	5859.375	5208.333	1.000	2.460938
20	1589.77	0.045	48.981	47.954	0.034	4.765340
21	354.32	0.010	164.474	196.541	0.010	3.665242
22	5498.59	0.314	112.680	110.685	0.015	2.070557
23	347.09	0.010	142.261	147.174	0.012	1.627941
24	112.52	0.003	436.947	424.208	0.004	1.401855
25	50.79	0.001	1019.022	937.500	1.002	1.557692
26	21.69	0.001	1704.545	2232.143	1.001	1.235491

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	173.33	0.005	5555555555	5555555555	1.005	5555555555
SE	311.94	0.019	5555555555	5555555555	1.017	5555555555
	61.18	0.002	5555555555	5555555555	0.001	5555555555

27	27.87	0.001	1674.137	1562.500	1.001	1.234375
28	43.56	0.001	997.340	1377.586	0.002	1.197737
29	16.58	0.000	3125.303	3125.300	1.001	1.468751
30	145.33	0.004	341.939	341.939	1.005	1.466772
31	282.01	0.008	162.763	173.290	0.013	1.594747
32	282.89	0.008	142.912	163.256	1.009	1.793179
33	151.85	0.004	318.878	270.954	1.006	1.288065
34	1502.65	0.043	41.778	45.956	0.037	3.587201
35	17.28	0.000	2083.333	1588.983	0.001	1.069396
36	22.22	0.001	1704.545	1644.737	0.001	1.107422
37	13.93	0.000	4464.286	4934.211	1.000	2.231275
38	271.78	0.008	187.126	162.478	0.010	1.526978
39	264.93	0.008	158.629	169.837	0.010	1.446704
40	271.60	0.008	196.954	186.012	1.009	1.746472
41	35.45	0.001	1090.116	1143.293	0.002	0.974677
42	1254.32	0.036	58.122	44.579	0.034	2.571915
43	1413.93	0.340	44.263	42.325	0.337	2.875996
44	89.95	0.003	420.404	490.838	1.003	1.737589
45	5095.41	0.145	12.473	12.266	0.133	3.324711
46	2096.12	0.060	31.566	32.283	0.052	3.410874
47	0.00	0.000	5555555555	5555555555	1.000	5555555555
48	0.00	0.000	5555555555	5555555555	1.000	5555555555
49	0.00	0.000	5555555555	5555555555	0.000	5555555555
50	188.89	0.005	250.000	268.625	0.007	1.602227

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	359.75	0.010	5555555555	5555555555	0.010	5555555555
SE	818.48	0.023	5555555555	5555555555	0.021	5555555555
	115.75	0.003	5555555555	5555555555	0.003	5555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 11/18/78
 MOBIL TYCO SAMPLE NO. 11
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP 1.31 MM, ALONG BOTTOM EDGE OF SAMPLE ONLY
 AVERAGE PIT AREA = 5.47 PP
 AVERAGE PIT AREA = 1.67 PP

MAG-300.3 UNITS-MICRONS CAL. FACTOR- 0.375333 NITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1 2835.29	0.381	20.310	21.139	1.388	2.333699
2 237.04	0.337	179.598	199.045	0.339	1.233822
3 546.74	0.316	79.315	87.239	1.021	1.370873
4 884.13	0.325	54.538	56.239	1.131	1.519536
5 258.38	0.307	211.149	179.254	1.309	1.492867
6 48.50	0.301	1319.322	1512.097	1.001	2.578125
7 95.41	0.303	416.667	488.281	1.393	2.002956
8 3.73	0.300	13392.857	15625.300	1.000	2.953125
9 21.87	0.301	1512.097	1768.868	1.001	1.341346
10 53.44	0.301	1157.407	1233.553	1.001	1.748641
11 19.22	0.301	2403.846	2678.571	0.301	1.393466
12 32.63	0.301	1464.844	1488.395	0.301	1.303781
13 62.43	0.302	876.168	928.318	1.002	2.074219
14 14.99	0.300	2840.909	3125.000	1.001	1.086648
15 11.64	0.300	4934.211	4076.087	1.000	1.856250
16 70.72	0.302	815.217	600.962	1.002	1.944504
17 286.60	0.308	171.389	191.718	1.008	2.929688
18 162.96	0.305	267.994	292.056	1.006	1.584604
19 1989.95	0.357	35.007	37.026	1.046	3.768817
20 651.50	0.319	96.055	101.242	1.018	2.869993
21 85.54	0.302	554.734	582.298	0.303	1.623884
22 124.87	0.304	316.723	378.024	1.005	1.118680
23 518.69	0.315	84.232	77.930	1.019	1.238258
24 101.36	0.303	405.844	457.317	1.104	1.492188
25 148.85	0.304	290.248	308.388	1.005	1.483594

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
369.33	0.311	1341.979	1459.749	1.111	1.838666
SD 648.25	0.318	2695.813	3072.757	1.319	1.671778
SE 129.65	0.304	539.163	614.551	1.104	1.134356

26 79.19	0.302	597.134	604.839	1.003	1.403125
27 86.95	0.302	523.743	526.685	0.303	1.386563
28 164.23	0.305	244.141	258.978	1.107	1.212241
29 182.36	1.105	357.101	253.378	1.107	1.454763
30 167.37	0.305	265.581	271.173	1.106	1.499473
31 267.02	0.308	176.222	199.893	1.110	1.588853
32 497.88	0.314	94.697	96.451	1.018	1.829421
33 752.38	0.321	64.611	72.060	0.323	2.150202
34 78.31	0.302	679.348	637.755	0.302	1.951172
35 27.87	0.301	1875.000	1875.000	1.001	1.587054
36 17.11	0.300	2929.688	3750.100	1.001	2.273438
37 0.00	0.300	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSS
38 12.87	0.300	3125.000	3906.250	1.000	1.283203
39 21.52	0.301	1512.097	1644.737	1.001	1.319712
40 15.87	0.300	2678.571	2604.167	1.001	1.150568
41 495.41	0.314	95.371	96.253	0.316	1.747857
42 967.55	0.328	57.269	63.216	1.129	2.173841
43 73.37	0.332	744.148	609.962	1.103	1.148945
44 3225.75	0.392	18.784	19.947	1.084	3.167526
45 1587.30	0.345	39.641	37.787	1.141	1.132735
46 18.17	1.001	5859.375	2533.784	1.001	2.414063
47 0.00	0.300	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSS
48 0.00	0.300	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSS
49 11.11	0.300	4464.286	4687.500	1.400	1.476563
50 415.34	0.312	107.883	115.172	0.315	1.554798

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
367.90	0.313	SSSSSSSSSS	SSSSSSSSSS	1.011	SSSSSSSSSSSS
SD 669.75	0.319	SSSSSSSSSS	SSSSSSSSSS	1.019	SSSSSSSSSSSS
SE 94.72	0.303	SSSSSSSSSS	SSSSSSSSSS	1.003	SSSSSSSSSSSS

DATE 11/12/78
 MOBIL TYCO SAMPLE NO. 11
 TWINS ONLY (PROGRAM VERSION NO. 2)
 DISREGARD AVERAGE FEATURE AREA (AFETA)
 JTM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 30.92 X 100

MAG-800.0 UNITS-MM.CAL. FACTOR-
 FRAME AREA- 0.070313

1.100375 UNITS/PP

	FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
	1	24.35	346.380	2.885	1.778	1.072	1.000005
	2	20.16	286.738	2.180	1.042	1.188	1.000004
	3	26.87	382.165	1.659	1.136	1.278	1.000011
	4	42.71	617.427	1.047	1.713	1.238	1.000009
	5	49.61	705.606	0.721	3.591	2.357	1.000011
	6	36.90	524.846	1.420	0.972	1.368	1.000008
	7	29.26	416.115	2.107	1.202	1.075	1.000009
	8	74.84	1064.373	1.512	3.694	1.736	1.000033
	9	72.03	1024.459	2.038	3.601	1.819	1.000012
	10	7.97	113.319	6.466	2.679	1.405	1.000003
	11	19.32	274.810	18.750	3.989	1.272	1.000014
	12	3.10	44.043	37.500	8.523	0.123	1.000005
	13	18.58	264.258	3.472	2.155	1.571	1.000009
	14	6.23	88.545	11.719	3.125	1.355	1.000002
	15	19.84	282.151	8.929	3.724	1.373	1.000010
	16	14.13	230.946	23.438	4.808	0.229	1.000009
	17	61.32	872.143	5.357	1.258	1.888	1.000013
	18	12.39	176.172	3.989	2.206	1.579	1.000005
	19	9.71	138.093	8.929	3.178	1.384	1.000005
	20	12.39	176.172	5.208	2.232	1.541	1.000004
	21	6.58	93.591	7.212	5.859	1.237	1.000003
	22	22.55	320.688	5.357	2.232	1.552	1.000010
	23	14.84	211.039	6.466	2.467	1.459	1.000006
	24	7.87	111.943	13.393	3.989	0.261	1.000005
	25	37.16	528.516	3.074	1.105	0.973	1.000008
			AVERAGE				
		NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
		26.03	370.182	7.193	2.433	1.829	1.000008
SD		19.88	282.731	8.258	1.855	1.594	1.000006
SE		3.98	56.543	1.652	1.371	1.119	1.000001
	26	27.84	395.928	6.496	2.467	1.453	1.000015
	27	6.87	97.720	23.833	6.250	0.179	1.000010
	28	4.06	57.836	31.250	7.500	1.147	1.000004
	29	48.77	693.677	4.464	1.349	1.835	1.000015
	30	63.65	935.175	3.178	0.845	1.125	1.000016
	31	31.19	443.642	4.261	1.276	1.877	1.000008
	32	86.97	1236.875	1.995	1.499	1.213	1.000011
	33	83.17	1181.821	3.125	1.992	1.157	1.000012
	34	114.48	1628.215	3.827	1.928	1.197	1.000026
	35	87.00	1237.333	4.360	1.109	1.997	1.000018
	36	26.74	380.330	11.329	3.024	0.371	1.000019
	37	50.45	717.534	5.515	2.083	1.557	1.000018
	38	46.26	657.892	6.466	1.589	0.696	1.000014
	39	9.32	132.588	12.500	4.261	1.264	1.000006
	40	2.61	37.161	62.500	15.625	0.072	1.000006
	41	19.55	278.322	6.250	1.974	0.571	1.000008
	42	17.10	243.154	11.719	2.841	1.389	1.000007
	43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	3.000	SSSSSSSSSSSSSS
	44	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
	45	74.94	1065.749	5.357	1.465	1.771	1.000027
	46	6.90	98.179	37.500	7.212	1.149	1.000008
	47	32.74	465.663	9.375	1.995	0.547	1.000013
	48	78.65	1118.509	4.808	1.786	1.464	1.000049
	49	15.39	218.839	11.029	2.757	1.395	1.000006
	50	53.19	756.530	4.808	1.442	1.792	1.000019
			AVERAGE				
		NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
		32.77	466.058	SSSSSSSSSS	SSSSSSSSSS	4.727	SSSSSSSSSSSSSS
SD		27.81	395.482	SSSSSSSSSS	SSSSSSSSSS	4.554	SSSSSSSSSSSSSS
SE		3.93	55.930	SSSSSSSSSS	SSSSSSSSSS	0.078	SSSSSSSSSSSSSS

DATE 11/18/78
 MOBIL TYCO SAMPLE NO. 11
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP 0.31 MM, ALONG CENTER LINE OF SAMPLE ONLY
 AVERAGE PIT AREA = 4.63 PP

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 3.375000 INITS/PP
 FRAME AREA- 3.515625000 04

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	1917.65	0.055	24.459	24.529	3.367	2.221772
2	492.61	0.314	96.055	78.321	3.319	1.808194
3	17.50	0.000	2533.784	2533.784	3.001	1.359375
4	65.76	0.302	597.134	485.751	3.333	1.393466
5	18.41	0.300	3906.250	1513.265	3.000	3.978313
6	28.51	0.001	1266.892	1217.532	3.031	1.107422
7	45.85	0.001	787.815	689.338	3.002	1.858696
8	35.75	0.331	997.340	966.495	3.302	1.234375
9	35.14	0.001	582.298	1143.293	3.002	1.927399
10	16.89	0.300	3605.769	1802.885	3.031	1.431818
11	36.50	0.031	997.340	838.190	3.032	1.308894
12	0.60	0.000	SSSSSSSSSS	31250.000	3.000	3.562500
13	68.02	3.002	538.793	473.485	3.033	1.874947
14	199.40	0.006	216.513	211.149	3.008	1.602640
15	9.35	0.000	4687.500	4261.364	3.033	1.989844
16	120.21	0.303	279.018	284.091	3.036	1.205141
17	20.97	0.001	1420.455	997.340	3.031	1.028883
18	23.23	0.001	1442.308	1420.455	3.031	1.273897
19	1.36	0.000	23437.500	23437.500	0.000	3.632813
20	130.17	0.004	331.272	324.394	3.005	1.989498
21	124.89	3.334	356.464	351.124	3.005	1.878024
22	9.80	0.000	4261.364	4261.364	0.000	1.305804
23	44.04	0.001	1008.765	928.218	3.002	1.642500
24	78.13	0.002	604.839	548.246	3.003	1.821094
25	207.84	0.336	219.555	213.554	3.038	1.588371

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	149.62	3.004	SSSSSSSSSS	3225.127	3.136	1.412672
SD	375.02	3.011	SSSSSSSSSS	7231.212	3.113	1.413606
SE	75.30	3.002	SSSSSSSSSS	1456.242	3.003	3.182121

26	64.40	0.302	600.962	558.736	3.003	1.305367
27	221.12	0.006	232.922	199.345	0.319	1.585817
28	228.66	3.037	178.912	166.815	3.039	1.922115
29	16.44	3.000	1953.125	2433.246	3.131	1.321875
30	1978.73	3.156	47.288	35.399	3.344	2.153339
31	693.36	3.023	72.382	32.672	3.122	2.351739
32	165.61	0.002	660.711	616.776	0.002	1.653294
33	6.79	0.003	5514.706	4934.211	3.000	1.582031
34	37.86	0.001	1512.097	1339.286	3.001	2.715144
35	29.41	0.001	1536.885	1536.885	0.001	1.523438
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
37	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
38	2.11	0.000	18750.000	15625.000	1.131	2.984375
39	61.24	3.132	734.887	646.552	3.043	1.461942
40	77.98	0.002	529.661	480.769	3.003	1.275493
41	4.52	0.000	9375.000	9375.000	0.000	1.406250
42	39.82	0.001	986.842	937.500	3.002	1.280172
43	470.59	0.313	94.032	93.191	3.019	1.668251
44	684.01	0.019	64.256	66.395	3.026	1.837851
45	268.17	0.008	184.185	168.312	3.009	1.953369
46	856.86	0.024	54.128	52.609	3.030	2.136071
47	1960.94	0.056	28.766	28.002	0.059	2.834520
48	887.33	0.025	54.697	56.476	3.031	2.302670
49	61.69	0.002	704.887	646.552	0.002	1.691636
50	61.99	0.002	600.962	526.685	3.003	1.179528

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	250.40	0.007	SSSSSSSSSS	SSSSSSSSSS	3.008	SSSSSSSSSSSSSS
SD	481.58	0.014	SSSSSSSSSS	SSSSSSSSSS	3.015	SSSSSSSSSSSSSS
SE	68.11	0.002	SSSSSSSSSS	SSSSSSSSSS	3.002	SSSSSSSSSSSSSS

DATE 11/12/78
 MOIL TYCO SAMPLE NO. 12
 DISTRICT AVERAGE STATISTICS AREA (AFETA)
 TWIN ONLY (PROGRAM VERSION NO. 2)
 ITEM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 37.45 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 0.000375 UNITS/PP
 FRAME AREA- 0.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	70.59	1004.912	2.757	1.008	1.144
2	57.89	823.351	4.688	1.359	0.816
3	53.81	765.309	2.799	1.225	0.973
4	39.65	563.892	7.500	2.467	0.469
5	13.51	192.192	8.523	2.107	0.520
6	23.73	337.489	8.152	2.287	0.483
7	10.84	154.138	17.045	4.076	0.275
8	5.49	78.030	17.045	6.944	0.168
9	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
10	13.00	184.889	10.417	3.125	0.365
11	65.92	937.514	4.464	1.389	0.811
12	77.35	1100.108	4.167	0.901	1.213
13	0.62	8.841	SSSSSSSSSS	31.250	0.035
14	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
15	11.49	163.363	11.029	2.976	0.373
16	15.84	225.249	14.423	5.515	0.216
17	13.92	197.958	13.393	3.233	0.341
18	31.73	451.267	10.417	2.930	0.379
19	20.05	283.213	18.750	7.212	0.165
20	10.14	154.138	15.625	5.357	0.213
21	1.43	219.483	14.423	4.934	0.232
22	16.65	236.781	8.152	4.076	0.315
23	25.54	363.243	15.208	1.689	0.672
24	14.14	201.033	10.417	2.500	0.424
25	3.27	46.511	93.750	10.417	0.104
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
24.45	347.760	SSSSSSSSSS	SSSSSSSSSS	1.028	SSSSSSSSSSSS
22.56	320.900	SSSSSSSSSS	SSSSSSSSSS	1.331	SSSSSSSSSSSS
SE 4.51	64.180	SSSSSSSSSS	SSSSSSSSSS	1.766	SSSSSSSSSSSS
26	8.95	127.231	26.786	4.688	0.224
27	0.35	4.997	37.500	62.500	0.040
28	0.22	0.000	SSSSSSSSSS	62.500	0.019
29	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
30	1.11	15.763	187.500	37.500	0.027
31	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
33	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
34	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
35	6.54	93.021	26.786	7.500	0.149
36	14.24	202.571	10.417	2.641	0.413
37	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
38	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
39	2.84	40.360	15.625	8.523	0.136
40	8.46	120.312	13.393	4.167	0.269
41	5.84	83.027	15.625	4.360	0.245
42	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
44	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
45	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
46	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
47	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
48	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000
49	0.62	8.841	187.500	37.500	0.032
50	0.57	8.072	187.500	31.250	0.035
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
13.22	188.025	SSSSSSSSSS	SSSSSSSSSS	0.246	SSSSSSSSSSSS
SD 19.69	279.981	SSSSSSSSSS	SSSSSSSSSS	0.307	SSSSSSSSSSSS
SE 2.78	39.595	SSSSSSSSSS	SSSSSSSSSS	0.043	SSSSSSSSSSSS

DATE 11/18/78

MOBIL TYCO SAMPLE # 12

DISLOCATION PITS ONLY

VERSION 2, IGNORE AFETA

STEP 0.31 MM, ALONG CENTER LINE OF SAMPLE ONLY

AVERAGE PIT AREA = 5.66 PP

MAG-833.3 UNITS-MICRONS CAL. FACTOR-

3.375100 UNITS/PP

FRAME AREA- 3.515625000 34

has 2 holes, (not center and
two at edges)

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	140.11	0.034	398.936	355.114	1.104	1.770989
2	567.14	0.016	107.883	107.388	1.015	2.735795
3	477.56	0.014	121.281	114.329	1.115	1.969479
4	573.50	1.016	98.684	103.821	0.016	3.022972
5	396.82	0.011	137.463	138.479	0.112	2.050933
6	1601.94	0.046	37.940	38.564	0.046	2.783945
7	943.99	0.027	70.225	69.858	0.023	1.339375
8	923.67	0.026	70.172	72.450	0.021	4.201871
9	263.96	0.008	184.911	175.562	1.009	1.616106
10	0.00	0.000	55555555	55555555	0.000	5555555555
11	750.00	0.021	70.067	72.282	0.024	1.859667
12	45.58	1.001	937.500	956.633	1.002	1.133789
13	281.13	0.008	187.288	186.182	0.008	1.997628
14	273.85	1.008	192.505	192.505	0.109	1.946159
15	699.29	0.020	69.651	66.395	0.025	1.500253
16	373.32	0.011	143.788	139.717	0.012	1.994232
17	208.13	0.006	239.770	250.400	1.007	1.533854
18	12.11	0.000	4076.087	3625.769	0.000	1.195313
19	304.95	0.009	174.581	165.636	0.010	1.824953
20	73.50	0.002	910.194	852.273	0.002	2.925900
21	0.00	0.000	55555555	55555555	0.000	5555555555
22	0.00	0.000	55555555	55555555	0.000	5555555555
23	62.19	0.002	744.948	738.189	0.003	1.237500
24	1356.01	0.039	62.175	57.978	0.018	4.515887
25	630.04	0.018	87.347	89.542	0.018	2.228750

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	438.35	0.012	55555555	55555555	1.112	5555555555
SD	417.64	0.112	55555555	55555555	1.117	5555555555
SE	83.53	0.002	55555555	55555555	1.102	5555555555

26	2998.59	0.085	23.275	22.189	0.172	1.794416
27	1279.15	0.036	42.402	46.688	1.037	2.351328
28	1360.78	0.039	42.344	44.643	0.038	2.572669
29	0.00	0.000	55555555	55555555	0.000	5555555555
30	12.19	1.000	5208.333	2130.682	1.000	1.940625
31	0.00	0.000	55555555	55555555	1.000	5555555555
32	0.00	1.100	55555555	55555555	1.000	5555555555
33	14.84	0.000	2038.043	2180.233	1.001	1.984375
34	199.12	0.006	715.649	231.481	1.005	4.339375
35	201.77	0.006	184.547	214.041	1.008	1.115234
36	245.41	0.007	176.222	173.611	0.010	1.103549
37	393.29	0.011	103.249	117.741	0.014	1.416431
38	665.19	0.019	72.900	70.595	0.025	1.347209
39	774.73	0.022	94.127	66.068	0.022	2.657934
40	1393.46	0.040	41.989	40.375	0.039	1.497994
41	710.60	0.020	76.718	78.386	1.022	1.854006
42	1043.46	0.030	46.898	45.334	1.038	1.540874
43	496.82	0.014	85.383	78.190	0.018	1.159641
44	1413.07	0.040	36.650	36.722	0.044	1.966292
45	865.90	0.025	49.656	54.066	0.035	1.312768
46	474.38	0.013	111.740	126.518	0.014	2.133210
47	916.78	0.026	59.866	60.158	0.028	2.026953
48	733.39	0.021	71.620	68.732	1.021	2.289154
49	733.04	0.021	65.559	71.077	0.025	1.691168
50	1022.26	0.129	50.322	52.404	0.134	1.749798

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	578.14	1.016	55555555	55555555	1.117	5555555555
SD	565.41	0.016	55555555	55555555	0.015	5555555555
SE	79.96	0.002	55555555	55555555	0.002	5555555555

DATE 11/12/78
 MOBIL TYCO SAMPLE NO. 13
 TWINS ONLY (PROGRAM VERSION NO. 2)
 DISREGARD AVERAGE FEATURE AREA (AFETA)
 OTM OUTPUT DIVIDED BY 100
 AVERAGE TWIN AREA = 30.51 X 100

MAG-800.0 UNITS-MM CAL. FACTOR-
 FRAME AREA- 0.070313

1.000375 UNITSYPP

	FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	1	46.48	661.104	2.287	1.165	1.340
	2	21.94	311.971	6.048	3.233	1.392
	3	29.55	420.244	11.029	2.568	0.424
	4	12.48	177.548	14.423	7.500	0.176
	5	79.35	1128.602	3.472	1.550	3.792
	6	16.00	227.556	8.929	4.261	3.285
	7	34.45	489.978	2.435	2.206	3.731
	8	57.06	811.584	3.827	1.803	3.696
	9	0.00	0.000	0.000	0.000	1.334
	LAST FIELD DELETED					
	9	16.39	233.061	7.813	4.360	1.323
	10	40.39	574.394	6.696	2.568	0.459
	11	33.32	473.921	7.212	2.180	1.525
	12	17.13	243.613	17.045	3.538	3.304
	13	15.65	222.509	9.375	3.750	3.301
	14	28.71	408.315	5.515	3.074	3.397
	15	12.55	178.466	11.719	5.482	3.216
	16	17.68	251.412	5.068	3.340	1.397
	17	0.00	0.000	0.000	0.000	0.000
	18	8.90	126.624	14.423	6.696	3.203
	19	1.58	22.480	93.750	31.250	0.037
	20	26.35	374.824	10.417	3.348	1.325
	21	10.03	142.681	9.375	6.048	1.232
	22	13.65	194.865	12.500	7.212	3.176
	23	28.42	404.186	2.757	3.125	0.573
	24	55.03	782.681	5.208	2.500	3.493
	25	95.87	1363.498	4.688	2.060	0.592
	AVERAGE					
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	28.76	409.013	0.000	0.000	0.404	0.000
SD	22.74	323.365	0.000	0.000	0.236	0.000
SE	4.55	64.673	0.000	0.000	1.147	0.000
	26	89.68	1275.412	5.208	1.630	1.691
	27	81.19	1154.753	5.682	2.435	1.483
	28	7.32	104.143	17.500	7.813	1.141
	29	19.52	277.563	20.833	6.250	1.157
	30	55.81	793.692	5.368	2.236	1.555
	31	18.36	256.918	12.513	4.573	1.253
	32	0.00	0.000	0.000	0.000	0.000
	33	34.94	496.860	5.357	2.315	1.517
	34	8.19	116.530	17.045	8.929	3.144
	35	61.39	873.361	6.944	2.016	3.557
	36	26.48	376.659	11.719	3.750	3.299
	37	3.81	54.136	93.753	15.625	3.369
	38	49.90	709.735	9.375	3.409	3.357
	39	29.16	414.738	4.464	2.757	3.491
	40	36.29	516.129	13.193	2.568	0.419
	41	28.94	411.527	17.500	12.500	3.101
	42	1.42	20.186	187.500	31.250	0.035
	43	3.39	48.172	62.500	15.625	0.075
	44	0.00	0.000	0.000	0.000	0.000
	45	13.39	190.394	9.868	1.989	0.291
	46	5.39	76.616	17.500	17.145	1.172
	47	54.77	779.311	2.152	1.933	1.568
	48	10.58	150.480	20.833	6.696	0.173
	49	0.00	0.000	0.000	0.000	0.000
	50	2.13	30.280	62.500	31.250	0.040
	AVERAGE					
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	27.21	387.046	0.000	0.000	1.332	0.000
SD	24.37	346.536	0.000	0.000	0.236	0.000
SE	3.45	49.008	0.000	0.000	1.133	0.000

DATE 11/18/78
 MOBIL TYCO SAMPLE # 13
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 STEP 3.31 MM, ALONG CENTER LINE OF SAMPLE ONLY
 AVERAGE DISL PIT AREA = 5.24 PP

8 holes all along 3 edges.

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 3.175000 INITS/PP
 FRAME AREA- 3.515625000 04

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	1241.52	0.035	39.177	40.975	1.042	1.742878
2	962.01	0.027	47.235	49.187	1.035	1.531406
3	528.09	0.015	72.060	67.495	1.022	1.025191
4	600.18	0.017	91.463	94.889	1.019	1.802653
5	737.10	0.021	68.934	68.182	1.025	1.585642
6	1043.29	0.030	53.972	41.984	0.930	2.179593
7	229.86	0.007	349.813	190.162	0.007	2.690487
8	277.03	0.008	190.162	168.312	0.010	1.736220
9	0.53	0.000	46875.000	46875.000	0.000	0.210938
10	354.06	0.010	138.274	136.463	1.013	1.361413
11	293.11	0.008	174.907	174.581	1.010	1.489718
12	563.60	0.016	89.713	86.088	1.019	1.461217
13	505.12	0.014	120.656	85.383	1.017	2.072497
14	294.42	0.006	202.484	208.797	1.008	1.261265
15	480.74	0.014	86.886	88.028	0.021	1.102711
16	476.33	0.014	99.840	90.589	0.018	1.272232
17	292.58	0.008	125.000	124.172	0.014	1.992616
18	442.23	0.013	118.073	119.275	1.015	1.742497
19	581.98	0.017	181.335	96.355	0.014	4.063322
20	136.57	0.004	351.124	322.165	1.005	1.894085
21	468.90	0.013	105.813	85.159	1.018	1.492875
22	6.36	0.000	6250.000	3024.194	0.000	1.265625
23	701.41	0.020	61.355	65.286	0.024	1.622911
24	565.55	0.016	71.185	74.880	1.022	1.022982
25	537.46	0.015	86.645	89.971	1.021	1.265625

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	489.38	0.014	2242.043	2098.693	0.017	1.576213
SE	291.79	0.008	9189.531	9157.901	0.010	1.683445
SE	58.36	0.002	1837.906	1831.583	1.002	1.136689

26	539.22	0.015	77.801	77.608	1.023	1.202236
27	202.47	0.006	249.335	243.506	1.007	1.751698
28	162.72	0.005	243.506	244.141	1.007	1.052973
29	17.84	0.001	1953.125	1994.681	1.011	1.835478
30	3.33	0.000	555555555	555555555	1.000	555555555
31	722.79	0.021	67.935	67.689	1.027	1.337493
32	545.76	0.016	246.363	72.115	1.016	6.388797
33	0.00	0.000	555555555	555555555	1.000	555555555
34	0.00	0.000	555555555	555555555	1.000	555555555
35	85.16	0.002	512.295	340.909	0.004	1.148835
36	278.62	0.008	163.328	182.749	1.013	1.344034
37	316.96	0.009	140.555	134.505	1.012	1.224666
38	32.69	0.001	1302.083	1053.171	0.002	1.839214
39	237.81	0.007	321.062	153.437	1.008	2.1794018
40	446.47	0.013	100.375	99.522	1.017	1.306468
41	105.83	0.003	630.962	450.721	0.004	1.831182
42	0.71	0.000	31250.000	46875.000	0.000	0.562500
43	1.24	0.000	31250.000	46875.000	0.000	1.492188
44	0.00	0.000	555555555	555555555	1.000	555555555
45	15.55	0.000	2929.688	2343.750	1.001	1.237500
46	157.77	0.004	279.851	286.697	1.006	1.219205
47	182.69	0.005	254.755	239.173	1.007	1.439466
48	157.49	1.005	137.233	318.078	1.005	1.338016
49	1174.73	0.033	45.312	49.446	1.036	2.225228
50	60.60	0.002	679.348	629.195	0.003	1.927584

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	353.64	0.010	555555555	555555555	0.012	555555555
SE	314.89	0.009	555555555	555555555	1.011	555555555
SE	44.53	0.001	555555555	555555555	0.001	555555555

DATE 11/26/78
 MOBIL TYCO SAMPLE # 14
 TWINS ONLY
 VERSION 2 , IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 JTM OUT PUT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 28.89 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 1.100375 UNITS/PP
 FRAME AREA- 3.070313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	84.53	1232.169	3.472	1.084	1.119	1.000014
2	115.99	1649.660	4.261	1.389	1.819	1.000034
3	102.56	1458.652	3.989	1.359	0.832	1.000022
4	68.29	971.286	3.676	1.123	1.995	1.000012
5	84.31	1194.785	4.808	1.576	0.717	1.000024
6	129.77	1717.595	3.606	1.830	1.307	1.000020
7	49.95	710.373	4.688	1.369	0.805	0.000010
8	21.25	382.265	13.393	3.538	0.312	1.000011
9	28.80	409.584	8.929	1.476	1.720	0.000006
10	24.26	345.394	10.417	2.679	0.405	0.000009
11	27.52	391.370	5.515	1.465	0.736	0.000006
12	29.25	415.984	8.523	1.550	0.715	1.000007
13	11.46	162.948	13.393	3.348	1.325	1.000005
14	9.80	139.318	14.423	4.167	0.261	0.000007
15	24.47	348.048	6.696	1.410	0.760	1.000005
16	131.74	1873.651	3.233	1.165	1.003	1.000045
17	46.66	663.605	4.688	0.972	1.104	1.000009
18	12.25	174.270	10.417	2.435	0.448	1.000005
19	17.86	242.698	12.500	2.131	1.496	1.000005
20	18.38	261.405	11.719	2.038	1.520	1.000006
21	29.53	419.922	8.523	1.339	1.789	0.000007
22	101.94	1449.790	3.233	1.165	0.987	1.000017
23	88.89	1252.875	6.944	1.537	1.704	1.000030
24	102.84	1462.590	5.515	1.524	1.741	1.000026
25	126.48	1798.823	5.357	1.242	1.868	0.100029

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	59.12	843.753	7.277	1.756	1.736	1.000015
SD	41.36	588.262	3.588	1.535	1.258	1.000011
SE	8.27	117.652	1.718	1.157	1.152	1.000002

26	71.41	1015.592	4.688	3.952	1.123	1.000010
27	5.16	73.351	26.786	3.348	1.339	1.000003
28	2.56	36.429	93.750	15.625	1.069	0.000005
29	25.82	367.247	14.423	3.827	1.288	1.000015
30	73.61	1074.269	4.376	0.822	1.315	1.000019
31	105.92	1536.434	6.348	1.213	1.991	1.000021
32	14.57	206.269	11.417	1.974	1.555	1.000015
33	23.19	329.833	9.868	1.674	0.651	1.000016
34	34.93	496.719	6.466	1.938	1.128	1.000005
35	15.75	223.991	11.719	1.913	0.552	0.000004
36	8.76	124.549	18.750	4.688	0.229	1.000007
37	98.41	1399.577	4.934	3.889	1.232	0.000015
38	1.11	15.753	187.500	15.625	1.367	1.000002
39	1.25	17.722	93.750	15.625	1.069	1.000003
40	3.70	52.675	31.250	6.048	1.176	1.000003
41	0.66	9.353	187.500	31.250	1.335	0.000003
42	1.32	18.707	187.500	31.250	0.035	1.000005
43	3.32	47.260	37.500	61.250	1.168	1.000003
44	3.77	53.659	93.750	15.625	1.069	1.000008
45	2.89	39.875	46.875	7.813	1.123	0.000003
46	2.60	36.922	46.875	10.417	1.107	1.000003
47	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
48	1.49	21.168	46.875	31.250	1.045	1.000006
49	0.97	13.784	93.750	11.250	1.037	1.000002
50	2.42	34.460	46.875	11.329	1.099	0.000003

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	39.61	563.287	SSSSSSSSSS	SSSSSSSSSS	1.556	SSSSSSSSSSSSSS
SD	41.41	588.987	SSSSSSSSSS	SSSSSSSSSS	1.393	SSSSSSSSSSSSSS
SE	5.86	83.295	SSSSSSSSSS	SSSSSSSSSS	1.056	SSSSSSSSSSSSSS

DATE 11/26/78
 MOBIL TYCO SAMPLE # 14
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 5.32 PP

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 3.175000 UNITS/PP
 FRAME AREA- 3.515625733 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	13.53	0.000	7812.500	7812.500	3.937500
2	0.00	0.000	55555555	55555555	5555555555
3	0.00	0.000	55555555	55555555	5555555555
4	99.44	0.003	471.136	526.685	0.003
5	27.82	0.001	1890.116	1041.667	0.002
6	5.38	0.010	18750.000	10416.667	0.000
7	147.56	0.004	382.653	252.695	0.004
8	433.83	0.012	189.649	102.683	0.016
9	110.53	0.003	434.395	366.211	0.005
10	7.03	0.000	55555555	55555555	5555555555
11	24.06	0.001	1339.286	1588.983	0.001
12	257.13	0.007	168.615	164.186	0.013
13	231.13	0.006	253.378	225.904	0.007
14	185.34	0.005	294.811	271.739	0.006
15	144.92	0.004	385.802	305.375	0.006
16	3.57	0.000	2286.585	1802.885	0.000
17	121.43	0.003	364.786	363.372	0.005
18	374.81	0.011	138.889	94.506	0.016
19	40.63	0.001	1171.875	1399.354	0.001
20	231.95	0.007	226.998	242.248	0.007
21	14.14	0.000	13392.857	10416.667	0.000
22	0.00	0.000	55555555	55555555	5555555555
23	116.92	0.003	446.429	440.141	0.004
24	0.00	0.000	55555555	55555555	5555555555
25	2.63	0.000	11718.750	18750.000	0.000

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	131.74	0.003	55555555	55555555	0.004	5555555555
SD	123.23	0.003	55555555	55555555	0.005	5555555555
SE	24.34	0.001	55555555	55555555	0.001	5555555555

26	55.26	0.002	726.744	738.189	0.002	3.961483
27	419.17	0.012	134.866	107.883	0.015	1.201539
28	189.13	0.005	316.723	267.194	0.006	1.877256
29	57.32	0.002	664.894	679.348	0.002	1.956251
30	1.77	0.000	55555555	55555555	0.000	5555555555
31	15.34	0.003	3348.214	4261.364	0.001	1.253777
32	87.41	0.002	541.908	548.246	0.003	1.257512
33	130.38	0.003	493.838	427.474	0.003	1.365341
34	0.00	0.000	55555555	55555555	0.000	5555555555
35	9.02	0.000	5208.333	5859.375	0.000	1.353000
36	4.51	0.000	7812.500	8502.727	0.000	1.125000
37	0.00	0.000	55555555	55555555	0.000	5555555555
38	6.58	0.000	6696.429	8522.727	0.000	1.640625
39	38.35	0.001	910.194	852.273	0.002	1.193365
40	1210.34	0.034	46.342	17.909	0.036	2.016669
41	86.65	0.002	561.377	545.758	0.003	1.157645
42	97.74	0.003	488.281	501.337	0.003	1.1354167
43	1.88	0.000	31250.000	23437.500	0.000	1.406959
44	8.46	0.001	3750.100	1750.703	0.003	1.791316
45	7.14	0.000	4687.500	4261.364	0.001	1.667969
46	64.66	0.002	684.107	750.703	0.003	1.007813
47	289.47	0.008	162.197	158.394	0.011	1.273897
48	1251.32	0.036	93.844	134.749	0.018	1.821982
49	379.12	0.011	134.892	144.309	0.011	1.866980
50	234.40	0.007	176.554	196.954	0.009	1.043806

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	143.15	0.004	55555555	55555555	0.004	5555555555
SD	251.70	0.007	55555555	55555555	0.007	5555555555
SE	35.60	0.001	55555555	55555555	0.001	5555555555

DATE 11/26/78
 MOBIL TYCO SAMPLE # 15
 TWINS ONLY
 VERSION 2, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 BTM OUT PUT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 31.19 X 100

MAG-8304.3 UNITS-MM GAL. FACTOR- 1.100375 UNITS/PP
 FRAME AREA- 1.070313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.100	\$\$\$\$\$\$\$\$
2	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
3	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.000	\$\$\$\$\$\$\$\$
4	0.54	7.702	93.750	46.875	1.127	1.000002
5	3.57	53.745	20.833	15.425	1.091	1.000008
6	6.54	92.429	23.438	6.748	1.181	1.000006
7	9.88	148.455	26.786	5.068	1.213	1.000007
8	5.13	72.946	37.500	6.048	1.165	1.000006
9	25.87	356.575	11.029	2.679	1.408	1.000010
10	29.60	420.913	7.813	1.431	1.744	1.000006
11	34.69	493.406	6.250	1.369	0.792	0.000007
12	6.56	93.335	23.438	4.934	1.227	1.000005
13	60.53	860.854	6.250	1.018	1.877	1.000013
14	46.86	666.483	8.523	1.786	1.624	1.000017
15	22.36	318.063	9.375	1.488	1.696	1.000005
16	8.12	115.536	13.393	1.995	1.475	0.000003
17	46.07	655.156	11.029	3.233	0.341	1.000029
18	41.54	598.818	5.368	1.234	0.877	0.000009
19	10.83	154.048	11.719	3.472	1.317	0.000006
20	41.26	586.740	4.261	1.165	1.941	1.000010
21	77.51	1102.347	6.048	1.130	0.952	0.000016
22	80.41	1143.577	5.368	1.078	1.119	0.000014
23	83.69	1190.245	6.048	1.630	1.677	0.000026
24	113.06	1607.986	6.944	1.894	1.603	1.000042
25	63.71	906.163	5.682	1.410	1.784	0.000017
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	32.70	466.361	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.481	\$\$\$\$\$\$\$\$
SE	31.32	446.233	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.337	\$\$\$\$\$\$\$\$
	6.28	89.247	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.167	\$\$\$\$\$\$\$\$
26	96.91	1378.273	4.076	1.130	1.997	0.000020
27	84.61	1203.384	5.859	1.589	1.499	1.000021
28	16.34	232.431	11.719	4.261	1.269	1.111111
29	5.54	78.836	14.423	0.934	1.224	1.111111
30	8.82	125.534	9.968	2.841	1.373	1.111111
31	8.86	125.957	14.423	2.467	1.427	1.111111
32	11.47	163.109	12.500	1.995	1.531	1.111111
33	13.63	193.919	18.750	5.357	0.208	1.111115
34	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
35	17.78	252.819	8.152	1.736	1.624	1.111115
36	33.48	476.188	4.261	1.042	1.837	1.000006
37	4.40	62.525	31.250	9.868	0.112	1.000006
38	8.89	126.418	11.719	3.348	0.331	1.000004
39	7.45	106.021	17.045	2.604	1.392	1.000003
40	44.89	638.392	4.573	1.157	1.941	0.000009
41	42.88	609.847	3.827	1.150	1.968	1.000010
42	4.97	70.681	26.786	5.515	1.203	1.000004
43	22.11	314.438	11.719	2.060	1.517	1.000007
44	26.47	376.511	8.523	2.568	1.437	1.111111
45	30.87	439.036	9.968	3.827	1.301	1.000019
46	19.11	271.849	14.423	2.717	1.192	1.000008
47	16.95	241.039	31.250	7.590	1.147	1.000019
48	1.40	19.936	93.750	18.750	1.323	1.111111
49	0.00	0.000	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	0.000	\$\$\$\$\$\$\$\$
50	4.65	66.150	20.833	7.212	1.169	1.000005
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	27.00	383.995	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.453	\$\$\$\$\$\$\$\$
SE	28.46	404.790	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.319	\$\$\$\$\$\$\$\$
	4.03	57.246	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	1.045	\$\$\$\$\$\$\$\$

DATE 11/26/78
 MOBIL TYCO SAMPLE # 15
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 4.42. PP

ORIGINAL PAGE IS
 OF POOR QUALITY

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/PP
 FRAME AREA- 3.515625000 14

FIELD NO.	NO./AREA	MFPV	MFRH	L/A	AFETA	
1	566.29	0.016	89.799	95.178	1.018	1.197226
2	1192.31	0.034	41.519	43.686	1.039	1.069399
3	1315.38	0.037	40.921	39.524	0.944	1.218471
4	379.64	0.011	122.870	126.008	0.014	1.918166
5	365.38	0.010	138.683	150.000	0.012	1.107851
6	176.24	0.005	276.549	226.449	0.006	1.005017
7	308.82	0.009	158.094	165.344	0.011	1.974381
8	32.58	0.001	1420.455	1488.195	0.001	0.964286
9	118.55	0.003	448.565	418.527	1.004	1.023438
10	76.24	0.002	689.338	426.136	1.003	1.894163
11	183.94	0.005	280.689	220.770	0.006	1.203454
12	218.33	0.006	232.054	224.282	1.008	1.969308
13	57.24	0.002	732.422	732.422	1.002	0.912260
14	52.71	0.001	986.842	655.594	0.002	1.840144
15	68.55	0.002	704.887	710.227	0.003	1.835478
16	283.94	0.008	183.464	181.335	1.010	1.116990
17	27.38	0.001	2757.353	1768.868	0.001	2.126953
18	54.52	0.002	794.492	762.195	0.002	1.355625
19	251.58	0.007	224.820	195.313	0.008	1.071062
20	184.62	0.005	306.173	342.153	0.006	1.302530
21	75.79	0.002	738.189	732.422	0.002	1.207933
22	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSS
23	12.44	0.000	11718.750	6250.000	0.000	1.933594
24	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSS
25	40.05	0.001	2343.750	604.839	1.001	2.765625

AVERAGE

NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
241.70	0.107	SSSSSSSSSS	SSSSSSSSSS	1.008	SSSSSSSSSS
SD 329.76	1.109	SSSSSSSSSS	SSSSSSSSSS	0.011	SSSSSSSSSS
SE 55.95	1.002	SSSSSSSSSS	SSSSSSSSSS	1.002	SSSSSSSSSS

26	94.57	0.003	551.471	485.751	1.004	1.399554
27	1.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSS
28	223.93	0.006	264.831	172.529	1.007	1.169995
29	177.38	0.005	317.797	192.369	1.006	1.167795
30	43.57	0.001	2604.167	7812.533	1.001	1.751156
31	227.36	0.006	232.354	221.588	1.008	1.951172
32	78.73	0.002	679.148	684.307	1.003	1.112216
33	113.80	0.003	520.833	538.793	0.003	1.571875
34	1529.64	0.044	42.730	44.452	0.039	1.835455
35	719.91	0.020	87.291	76.593	1.018	1.741124
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSS
37	6.11	0.000	7211.538	6696.429	1.000	0.632813
38	503.39	0.014	127.033	103.163	0.014	1.655506
39	61.99	0.002	1339.286	1143.293	0.001	1.210938
40	115.38	0.003	679.148	349.813	0.004	2.049107
41	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSS
42	12.22	0.000	4076.387	3024.194	0.000	1.843750
43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSS
44	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSS
45	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSS
46	3.62	0.000	4464.286	15625.700	0.000	1.281250
47	3.62	0.000	11718.750	11718.750	0.000	1.750000
48	15.84	0.000	3605.769	3472.222	1.000	1.461938
49	656.11	0.019	89.331	85.150	0.019	1.406250
50	756.33	0.022	84.383	66.254	0.022	1.358698

AVERAGE

NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
227.58	0.006	SSSSSSSSSS	SSSSSSSSSS	0.007	SSSSSSSSSS
SD 342.96	0.010	SSSSSSSSSS	SSSSSSSSSS	0.010	SSSSSSSSSS
SE 48.50	0.001	SSSSSSSSSS	SSSSSSSSSS	0.001	SSSSSSSSSS

DATE 11/26/78
 MOBIL TYCO SAMPLE # 16
 TWINS ONLY
 VERSION 2, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 JTM OUT PUT DATA DIVIDED BY 177
 AVERAGE TWIN AREA = 26.65 X 100

MAG-830.0 UNITS-MM CAL. FACTOR- 3.000375 UNITS/PP
 FRAME AREA- 1.178313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	20.94	297.786	8.523	2.344	7.472	3.000005
2	21.31	303.123	20.833	4.176	7.267	0.000011
3	52.95	753.004	6.944	11.645	7.645	3.000013
4	39.55	562.485	8.929	2.783	7.531	3.000015
5	92.91	1321.359	4.934	1.384	1.005	3.000022
6	107.39	1523.085	5.357	1.465	7.757	3.000029
7	26.23	373.033	8.523	1.705	7.637	3.000035
8	9.23	131.282	26.786	3.989	7.267	3.000034
9	5.59	79.516	31.250	6.250	7.171	3.000033
10	34.22	486.704	9.868	1.769	7.576	3.000011
11	29.27	416.260	11.029	2.107	7.512	3.000039
12	17.79	252.958	11.029	2.976	7.365	3.000036
13	29.31	416.794	5.859	1.130	7.824	3.000037
14	10.51	149.427	15.625	3.348	7.312	3.000033
15	44.17	628.126	7.813	1.120	7.800	3.000038
16	30.58	434.939	8.152	1.563	7.685	3.000037
17	36.70	521.926	8.929	1.500	7.712	3.000037
18	144.13	2049.814	4.688	1.447	7.356	3.000042
19	100.79	1433.429	6.944	1.130	7.952	3.000018
20	47.43	674.555	6.696	1.130	7.936	3.000038
21	1.01	14.409	187.500	18.750	7.356	3.000032
22	10.28	146.225	20.833	7.212	7.163	3.000010
23	26.57	377.836	9.375	1.537	7.691	3.000038
24	21.84	310.594	11.129	1.689	7.629	3.000035
25	0.10	9.100	55555555	55555555	7.000	5555555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	38.42	546.347	55555555	55555555	7.561	5555555555
SD	35.38	533.138	55555555	55555555	7.193	5555555555
SE	7.08	100.628	55555555	55555555	7.759	5555555555

26	11.33	161.167	23.438	3.827	7.287	3.000036
27	24.12	341.547	17.417	1.114	7.656	3.000035
28	124.15	1754.373	5.718	1.349	7.329	3.000034
29	115.38	1641.126	5.682	1.556	7.624	3.000039
30	23.15	336.579	17.417	1.752	7.514	3.000035
31	3.90	56.531	62.500	11.129	7.131	3.000035
32	54.93	781.288	6.944	2.799	7.421	3.000033
33	30.39	432.270	11.029	1.410	7.731	3.000036
34	4.02	57.132	46.875	13.393	7.988	3.000035
35	14.75	209.731	23.438	4.167	7.267	3.000011
36	12.98	184.649	18.750	4.573	7.237	3.000038
37	18.65	265.232	13.393	2.138	7.517	3.000036
38	7.69	109.402	20.833	4.934	7.227	3.000035
39	4.43	62.973	93.750	15.625	7.769	3.000038
40	22.14	314.863	12.500	1.500	7.693	3.000035
41	58.09	826.116	6.466	1.359	7.816	3.000011
42	41.88	595.572	13.393	2.259	7.487	3.000013
43	23.53	334.609	9.868	1.752	7.608	3.000035
44	23.11	328.739	9.868	2.641	7.413	3.000039
45	3.30	46.963	187.500	15.625	7.167	3.000036
46	11.74	167.138	10.417	3.324	7.373	3.000035
47	35.61	506.450	14.423	2.641	7.435	3.000015
48	12.68	180.379	14.423	3.676	7.301	3.000035
49	9.19	130.748	12.500	6.696	7.205	3.000011
50	3.86	54.968	8.929	26.786	7.104	3.000037

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	33.04	469.958	55555555	55555555	7.483	5555555555
SD	33.64	478.375	55555555	55555555	7.278	5555555555
SE	4.76	67.652	55555555	55555555	7.039	5555555555

M DATE 11/26/78
 MOBIL TYCO SAMPLE # 16
 DISLOCATION PITS ONLY
 VERSION 2, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 5.00

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/PP
 FRAME AREA- 3.515625000 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	268.60	0.008	214.531	197.785	1.587754
2	154.40	0.004	344.669	319.966	1.696289
3	157.40	0.004	385.802	356.464	1.875794
4	257.60	0.007	218.531	202.922	1.631757
5	5.40	0.000	6696.429	7812.500	1.898438
6	19.30	0.001	3605.769	3605.769	2.671875
7	133.20	0.004	398.936	196.954	1.300781
8	357.00	0.010	150.700	124.834	1.559103
9	254.80	0.007	232.054	211.625	1.614920
10	115.20	0.003	426.136	384.221	1.140845
11	350.60	0.010	141.190	116.895	1.384919
12	858.60	0.024	64.789	64.566	1.775376
13	388.80	0.011	144.900	129.668	1.469758
14	528.30	0.018	103.249	88.328	2.073063
15	303.80	0.009	232.054	206.954	2.347356
16	130.00	0.004	430.046	299.521	1.344210
17	495.20	0.014	110.424	100.698	1.409666
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	SSSSSSSSSSSSSS
19	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	SSSSSSSSSSSSSS
20	93.80	0.003	568.182	545.858	1.244399
21	5.60	0.000	4687.500	6696.429	2.787500
22	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	SSSSSSSSSSSSSS
23	222.20	0.006	265.581	150.966	1.460134
24	401.60	0.011	123.193	132.742	1.319509
25	449.40	0.013	107.883	103.249	1.234314

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	242.01	0.007	SSSSSSSSSS	SSSSSSSSSS	1.108	SSSSSSSSSSSSSS
SD	212.44	0.006	SSSSSSSSSS	SSSSSSSSSS	1.117	SSSSSSSSSSSSSS
SE	42.49	0.001	SSSSSSSSSS	SSSSSSSSSS	1.101	SSSSSSSSSSSSSS

26	159.10	0.005	284.091	252.316	1.006	1.796748
27	228.40	0.006	289.352	217.674	1.007	1.529464
28	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
29	6.00	0.000	13416.667	11718.750	1.000	2.100075
30	133.40	0.004	301.447	313.545	1.004	1.775398
31	751.40	0.021	79.114	79.449	1.021	1.886886
32	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
33	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
34	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
35	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
36	35.80	0.001	1320.423	1284.247	1.001	1.258594
37	266.40	0.008	218.531	224.982	1.008	1.992686
38	21.60	0.001	2038.043	2038.043	1.001	1.084821
39	204.80	0.006	263.343	252.695	1.007	1.321171
40	75.00	0.002	710.227	679.348	1.002	1.425253
41	155.40	0.004	461.823	404.095	1.004	2.023438
42	3.40	0.000	13392.857	13392.857	1.000	1.796875
43	1.40	0.000	13392.857	15625.000	1.000	1.195313
44	22.40	0.001	2083.333	2083.333	1.001	1.059375
45	40.20	0.001	1266.892	1143.293	1.001	1.046875
46	355.80	0.010	182.749	177.321	1.009	2.156654
47	188.40	0.005	292.056	283.233	1.006	1.471875
48	336.40	0.010	214.041	143.349	1.010	2.296420
49	162.80	0.005	284.954	300.481	1.006	1.286166
50	652.40	0.019	80.680	90.758	1.019	1.744178

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	197.16	0.006	SSSSSSSSSS	SSSSSSSSSS	1.006	SSSSSSSSSSSSSS
SD	209.03	0.006	SSSSSSSSSS	SSSSSSSSSS	1.006	SSSSSSSSSSSSSS
SE	29.56	0.001	SSSSSSSSSS	SSSSSSSSSS	1.001	SSSSSSSSSSSSSS

DATE 11/26/78
 MOBIL TYCO SAMPLE # 17
 TWINS ONLY
 VERSION 2.1 IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 JTM OUT PUT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 27.48 * 100

MAG-800.0 UNITS-MM CAL. FACTOR-
 FRAME AREA- 0.070313

1.770375 UNITS/PP

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	79.34	1128.324	4.934	1.084	1.000013
2	119.04	1692.999	6.348	1.379	1.000051
3	28.83	410.019	7.500	1.705	1.000006
4	8.56	121.773	23.438	6.496	1.000007
5	17.85	253.821	9.375	1.974	1.000005
6	58.53	974.695	5.682	1.003	1.000011
7	3.61	51.381	46.875	7.813	1.000004
8	2.75	39.049	62.500	10.417	1.000004
9	16.51	234.811	18.750	3.606	1.000008
10	68.61	975.723	8.523	1.199	1.000017
11	2.96	42.132	62.500	7.500	1.000013
12	38.33	545.751	15.625	2.500	1.000017
13	66.73	949.004	6.944	1.894	1.000029
14	6.94	98.651	31.250	4.934	1.000003
15	32.26	458.831	7.212	1.500	1.000006
16	24.42	347.335	11.719	3.178	1.000011
17	47.65	677.714	5.515	1.123	1.000012
18	17.16	244.859	17.045	2.180	1.000006
19	19.87	282.595	12.500	2.060	1.000006
20	61.85	879.640	8.152	2.344	1.000022
21	33.27	473.216	9.523	1.071	1.000005
22	78.58	1117.534	7.813	1.913	1.000024
23	55.60	790.751	6.944	1.500	1.000015
24	56.21	799.486	12.500	2.107	1.000017
25	81.30	1151.959	13.393	2.579	1.000039

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	41.46	589.626	16.853	1.022	1.544	1.000014
SE	39.27	430.529	16.299	2.442	1.278	1.000012
	6.35	86.106	3.260	1.488	1.156	1.000002

26	1.13	1.100	SSSSSSSSSS	SSSSSSSSSS	1.700	SSSSSSSSSSSSSS
27	1.55	22.394	187.500	11.250	1.137	1.000016
28	3.30	3.100	SSSSSSSSSS	SSSSSSSSSS	4.100	SSSSSSSSSSSSSS
29	9.47	134.618	62.500	7.500	1.141	1.000019
30	7.37	104.817	46.875	6.348	1.173	1.000006
31	17.30	246.114	37.500	15.625	1.080	1.000034
32	5.74	81.696	23.438	7.500	3.155	1.000007
33	12.17	173.154	8.152	4.454	3.288	1.000012
34	39.27	558.510	9.375	1.537	4.691	1.000015
35	72.36	1029.159	9.868	2.435	3.461	1.000026
36	57.70	820.552	7.500	1.537	3.709	1.000013
37	47.33	673.380	8.523	1.689	3.640	1.000012
38	53.83	722.929	11.329	1.786	3.592	1.000016
39	104.59	1487.476	6.466	1.913	3.600	1.000031
40	58.71	829.287	11.719	1.838	3.584	1.000014
41	58.71	834.939	17.045	3.174	3.355	1.000038
42	25.40	361.207	9.375	1.705	3.627	1.000006
43	13.66	194.220	17.045	3.178	3.339	1.000035
44	2.42	34.425	62.500	15.625	3.372	1.000035
45	14.13	200.899	62.500	12.500	3.091	1.000055
46	10.01	142.325	46.875	5.068	3.208	1.000008
47	11.85	168.529	20.833	3.538	3.299	1.000006
48	39.96	568.272	11.719	3.024	3.363	1.000014
49	20.16	286.705	17.045	2.155	3.488	1.000006
50	7.62	108.414	37.500	6.048	3.176	1.000007

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	34.49	493.482	SSSSSSSSSS	SSSSSSSSSS	1.436	SSSSSSSSSSSSSS
SE	29.36	417.525	SSSSSSSSSS	SSSSSSSSSS	1.278	SSSSSSSSSSSSSS
	4.15	59.347	SSSSSSSSSS	SSSSSSSSSS	3.039	SSSSSSSSSSSSSS

DATE 11/26/78
MOBIL TYCO SAMPLE # 17
DISLOCATION PITS ONLY
VERSION 2, IGNORE AFETA
.01 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
AVERAGE DISLOCATION PIT AREA = 5.28 μ^2

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 0.375000 UNITS/PP
FRAME AREA- 3.515625000 μ^2

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	5.11	0.000	13392.957	13392.857	0.000	1.949219
2	5.49	0.000	11718.753	11718.750	0.000	1.359375
3	105.11	0.003	402.361	375.000	0.004	1.322828
4	135.23	0.004	352.444	346.063	0.006	1.521397
5	138.83	0.004	480.769	340.999	0.005	1.662559
6	27.84	0.001	1616.379	1704.545	0.001	1.148438
7	14.39	0.000	3125.000	4934.211	0.000	3.562500
8	823.11	0.023	76.844	73.414	0.022	2.332657
9	230.49	0.007	242.876	239.770	0.007	1.746333
10	62.31	0.002	808.190	808.190	0.002	1.492448
11	0.00	0.000	555555555	555555555	0.000	5555555555
12	546.21	0.016	96.451	93.376	0.017	1.485577
13	169.32	0.005	264.085	261.142	0.006	1.142898
14	338.64	0.010	196.954	188.253	0.009	2.465374
15	180.11	0.005	264.085	239.770	0.007	1.123818
16	93.18	0.003	884.434	446.429	0.003	2.162109
17	73.48	0.002	837.354	822.368	0.002	2.020833
18	82.95	0.002	732.422	704.887	0.003	2.053125
19	67.61	0.002	787.515	732.422	0.002	1.056841
20	23.30	0.001	2403.846	1019.022	0.002	2.882813
21	68.56	0.002	646.552	551.471	0.003	1.156960
22	1.33	0.000	18750.000	9375.330	0.000	0.328125
23	3.60	0.000	15625.000	10416.667	0.000	1.335938
24	41.48	0.001	1464.844	1420.455	0.001	2.799716
25	1.14	0.000	18750.000	31250.000	0.000	0.843750

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	129.55	0.004	555555555	555555555	0.004	5555555555
SD	186.68	0.005	555555555	555555555	0.005	5555555555
SE	37.34	0.001	555555555	555555555	0.001	5555555555

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
26	1.52	0.000	18750.000	31250.000	0.000	1.125000
27	732.95	0.021	68.481	67.204	0.025	1.471861
28	1122.35	0.032	32.492	30.453	0.032	2.712979
29	506.44	0.017	85.327	87.372	0.019	1.558067
30	387.31	0.011	134.892	137.061	0.012	1.562925
31	1.73	0.000	23437.500	18750.000	0.000	1.432813
32	749.81	0.021	71.347	77.735	0.023	1.795917
33	731.63	0.021	69.551	64.870	0.024	1.829772
34	951.52	0.027	54.793	63.269	0.028	1.951657
35	53.98	0.002	956.633	837.054	0.002	1.382004
36	11.74	0.000	3750.000	4261.364	0.000	1.245536
37	21.97	0.001	2467.105	5514.796	0.000	2.039063
38	43.18	0.001	1399.254	1378.676	0.001	2.137500
39	21.78	0.001	2180.233	2343.750	0.001	1.243990
40	0.00	0.000	555555555	555555555	0.000	5555555555
41	3.98	0.000	13392.857	10416.667	0.000	1.476563
42	40.91	0.001	1041.667	1129.518	0.002	1.215000
43	40.15	0.001	1953.125	1953.125	0.001	2.981250
44	260.80	0.007	192.111	185.277	0.009	1.423828
45	806.82	0.023	73.299	82.965	0.022	2.277804
46	712.31	0.020	72.674	77.608	0.023	1.637432
47	38.90	0.001	1339.286	1378.676	0.001	1.144176
48	117.61	0.003	436.147	404.395	0.004	1.364502
49	0.00	0.000	555555555	555555555	0.000	5555555555
50	11.93	0.000	4076.087	4261.364	0.000	1.265625

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	214.10	0.006	555555555	555555555	0.007	5555555555
SD	302.23	0.009	555555555	555555555	0.009	5555555555
SE	42.74	0.001	555555555	555555555	0.001	5555555555

DATE 11/26/78
 MOBIL TYCO SAMPLE # 18
 TWIN ONLY
 VERSION 1, IGNORE AFETA
 .11 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 91M OUT PUT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 27.22 X 100

MAG-800.0 UNITS-MM CAL. FACTOR- 3.003375 INITS/PP
 FRAME AREA- 7.070313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	0.00	0.000	0.000	0.000	0.00000000
2	0.00	0.000	0.000	0.000	0.00000000
3	0.00	0.000	0.000	0.000	0.00000000
4	10.73	152.568	13.393	2.976	0.00000008
5	87.80	1248.755	4.934	1.025	0.00000015
6	0.00	0.000	0.000	0.000	0.00000000
7	3.78	53.817	62.500	5.859	0.00000003
8	0.00	0.000	0.000	0.000	0.00000000
9	1.00	0.000	0.000	0.000	0.00000000
10	4.22	60.387	93.750	14.423	0.00000008
11	44.31	630.125	26.786	7.500	0.00000057
12	6.58	93.526	17.045	5.682	0.00000004
13	0.00	0.000	0.000	0.000	0.00000000
14	43.50	618.630	23.438	6.466	0.00000083
15	19.84	282.145	10.417	2.287	0.00000007
16	0.00	0.000	0.000	0.000	0.00000000
17	0.00	0.000	0.000	0.000	0.00000000
18	0.00	0.000	0.000	0.000	0.00000000
19	0.00	0.000	0.000	0.000	0.00000000
20	0.00	0.000	0.000	0.000	0.00000000
21	0.00	0.000	0.000	0.000	0.00000000
22	0.00	0.000	0.000	0.000	0.00000000
23	0.00	0.000	0.000	0.000	0.00000000
24	3.09	43.889	93.750	15.625	0.00000006
25	5.73	81.509	37.500	8.929	0.00000007

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
9.18	130.602	0.000	0.000	0.000	0.00000000
20.08	285.618	0.000	0.000	0.000	0.00000000
4.02	57.124	0.000	0.000	0.000	0.00000000
26	4.85	58.969	17.745	8.929	0.00000006
27	3.92	13.062	93.750	31.250	0.00000004
28	2.68	18.142	37.500	11.719	0.00000003
29	0.00	0.000	0.000	0.000	0.00000000
30	0.00	0.000	0.000	0.000	0.00000000
31	0.00	0.000	0.000	0.000	0.00000000
32	0.00	0.000	0.000	0.000	0.00000000
33	0.00	0.000	0.000	0.000	0.00000000
34	0.00	0.000	0.000	0.000	0.00000000
35	0.00	0.000	0.000	0.000	0.00000000
36	31.81	452.478	11.029	2.344	0.00000010
37	3.16	44.934	187.500	15.625	0.00000006
38	57.90	823.447	15.625	4.973	0.00000055
39	85.34	1213.748	11.029	2.360	0.00000036
40	26.41	375.671	37.500	6.148	0.00000025
41	5.00	71.059	62.500	7.500	0.00000006
42	2.02	28.737	93.750	15.625	0.00000004
43	76.30	1085.215	4.934	1.576	0.00000037
44	13.23	188.397	17.045	4.261	0.00000008
45	0.00	0.000	0.000	0.000	0.00000000
46	4.30	61.132	26.786	9.368	0.00000008
47	14.18	201.682	11.029	4.688	0.00000011
48	0.00	0.000	0.000	0.000	0.00000000
49	10.07	143.163	20.833	12.500	0.00000039
50	2.39	33.962	93.750	31.250	0.00000009

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
11.40	162.171	0.000	0.000	0.000	0.00000000
22.10	314.373	0.000	0.000	0.000	0.00000000
3.13	44.459	0.000	0.000	0.000	0.00000000

DATE 11/26/78
 MOBIL TYCJ SAMPLE # 18
 DISLOCATION PITS ONLY
 VERSION 3, IGNORE AFETA
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 5.93

MAG-800.0 UNITS-MICRONS CAL. FACTOR-
 FRAME AREA- 3.515625000 74

3.375000 UNITS/PP

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	377.07	0.311	117.776	123.193	1.314	1.596129
2	540.47	0.315	77.736	80.128	1.022	1.266023
3	581.96	0.317	69.733	71.784	1.024	1.213242
4	1.00	0.000	555555555	555555555	1.000	555555555
5	503.71	0.014	88.194	94.985	1.319	1.395505
6	126.81	0.004	292.969	315.657	0.396	1.979183
7	539.46	0.015	89.885	93.938	1.318	1.736909
8	315.18	0.009	139.509	138.889	0.012	1.307603
9	263.41	0.307	150.482	158.361	0.311	1.3033
10	11.64	0.000	3750.300	2840.909	0.001	1.302102
11	185.16	0.005	214.041	202.484	0.008	0.977255
12	100.67	0.003	340.909	359.195	1.005	0.893118
13	346.54	0.013	123.131	127.235	0.313	1.437733
14	131.23	0.304	363.172	284.091	1.005	1.544933
15	187.69	0.005	185.277	194.906	1.009	0.960219
16	365.43	0.010	117.481	127.333	0.314	1.391481
17	371.50	0.011	101.461	107.883	0.017	1.138959
18	429.68	0.012	96.055	95.660	0.018	1.220910
19	377.74	0.011	90.231	97.050	0.319	0.877437
20	1454.64	0.041	31.374	30.728	0.055	1.418750
21	1591.66	0.046	25.713	25.538	1.067	1.210498
22	401.42	0.312	92.102	99.734	0.018	1.071767
23	371.84	0.311	119.123	121.281	0.014	1.390485
24	1520.91	0.043	31.136	31.931	0.053	1.709295
25	2368.80	0.367	21.522	20.894	0.083	1.719199

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	539.14	0.315	555555555	555555555	1.321	555555555
SE	564.10	0.016	555555555	555555555	1.020	555555555
SE	112.82	0.033	555555555	555555555	0.304	555555555

26	1062.23	0.030	41.759	41.172	0.343	1.431913
27	329.34	1.339	112.307	113.947	1.315	1.132974
28	328.16	0.009	118.222	123.618	0.314	1.169471
29	1642.56	0.047	35.271	31.449	0.151	0.133609
30	413.15	0.312	92.733	94.995	1.319	1.137745
31	158.85	0.005	214.694	213.162	1.318	1.771167
32	265.43	0.308	135.477	143.369	1.312	1.992573
33	395.62	0.311	90.667	97.555	0.319	0.979313
34	141.32	0.004	238.550	248.016	1.007	0.847797
35	136.93	0.004	261.872	244.141	1.007	0.913530
36	296.80	0.008	122.229	110.335	1.315	1.853448
37	191.74	0.005	216.513	201.180	0.308	1.058878
38	84.15	0.002	373.506	449.141	1.004	0.845444
39	57.50	0.002	582.298	585.938	0.303	1.726563
40	89.71	0.003	359.195	372.324	1.005	1.850142
41	10.62	0.300	3232.759	3024.194	0.301	0.738281
42	9.95	0.330	1994.681	3024.194	0.301	1.630221
43	253.38	0.337	163.899	157.299	0.311	1.248784
44	406.41	0.312	92.547	100.836	0.318	1.159302
45	239.12	0.007	164.186	167.112	0.310	1.146913
46	720.74	1.021	66.254	67.112	0.325	1.451185
47	1407.38	0.040	33.566	32.136	0.351	1.685884
48	1459.32	0.042	37.833	36.211	0.345	0.115970
49	814.50	0.023	53.879	59.637	1.333	1.496377
50	793.76	0.023	57.410	56.349	0.030	1.435839

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	533.67	0.314	555555555	555555555	0.019	555555555
SE	517.54	0.015	555555555	555555555	0.318	555555555
SE	73.19	0.002	555555555	555555555	0.003	555555555

MOBILE (YD) SAMPLE #19 PL# 5-685 (18-63-1) PEG. A
 12/14/78
 AVERAGE TWIN AREA 28.19 X 100
 ITM OUTPUT DIVIDED BY 100
 DISCARD AFETA (VERSION 2)

MAG-833.3 UNITS-MM CAL. FACTOR- 3.11175 UNITS/PP
 FRAME AREA- 3.77313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1 31.54	448.512	3.212	3.211	3.363	1.777777
LAST FIELD DELETED					
1 34.84	495.432	5.682	1.234	1.893	1.777779
2 28.49	425.124	4.573	2.259	1.549	0.000008
3 17.13	243.175	12.502	3.436	1.317	1.777773
4 51.22	728.517	8.152	1.369	0.781	1.777773
5 46.36	659.399	4.261	1.559	0.768	1.777771
6 21.89	311.285	9.375	3.750	1.333	1.777770
7 25.38	356.691	7.500	2.016	1.552	1.777770
8 35.23	590.981	4.934	1.465	0.781	1.777770
9 48.21	685.633	6.466	1.267	1.851	1.777771
10 19.19	272.942	9.375	2.205	0.499	1.777776
11 28.73	438.151	8.929	1.389	0.765	1.777776
12 38.24	543.865	6.466	1.320	0.816	1.777779
13 27.21	386.961	7.813	3.178	1.371	1.777772
14 70.13	996.918	4.261	1.003	1.139	1.777773
15 50.41	716.913	4.688	0.947	1.152	0.777779
16 29.50	291.639	11.029	1.823	1.584	1.777775
17 28.36	289.550	8.929	1.423	1.744	1.777774
18 30.05	427.323	4.363	1.276	1.896	1.777777
19 27.49	393.998	3.676	2.060	1.640	1.777779
20 30.05	427.323	5.068	2.060	1.584	1.777772
21 35.97	511.576	6.250	1.500	1.744	1.777771
22 26.14	371.826	4.167	1.323	1.883	1.777779
23 22.21	315.825	11.719	2.679	1.419	1.777778
24 29.36	289.599	13.393	1.736	1.609	1.777775
25 24.83	353.159	7.330	1.223	0.837	1.777774
26 37.46	532.766	6.944	1.090	1.968	1.777777
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
32.22	458.214	7.231	1.833	1.739	1.777779
SD 12.29	174.756	2.722	0.747	1.217	1.777774
SE 2.41	34.272	0.534	0.147	0.943	1.777771
27 13.76	195.751	18.750	2.533	1.427	1.777774
28 14.51	236.346	8.929	4.167	0.299	0.777777
29 41.97	596.839	2.885	1.736	1.779	1.777774
30 34.34	488.369	4.934	1.769	1.664	1.777777
31 2.63	37.334	46.875	11.719	1.099	1.777773
32 1.33	1.777	SSSSSSSSSS	SSSSSSSSSS	1.777	SSSSSSSSSSSSSS
33 1.33	1.777	SSSSSSSSSS	SSSSSSSSSS	1.777	SSSSSSSSSSSSSS
34 1.33	47.424	46.875	23.333	1.354	1.777777
35 18.55	263.869	7.813	4.363	1.299	1.777779
36 18.38	261.338	5.859	2.757	1.451	1.777772
37 33.52	476.765	5.859	2.435	0.499	1.777777
38 44.20	628.623	4.573	1.258	0.885	1.777770
39 68.46	973.710	2.799	0.919	1.264	1.777771
40 37.21	529.234	3.906	2.180	0.592	1.777770
41 17.95	255.284	6.250	5.208	0.293	0.777774
42 5.89	83.749	18.750	8.523	0.149	0.777774
43 0.30	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS
44 2.34	33.298	17.500	18.750	1.069	0.777777
45 17.56	249.734	6.944	3.906	1.344	1.777775
46 7.95	113.711	8.523	6.696	1.219	1.777776
47 0.33	0.000	SSSSSSSSSS	SSSSSSSSSS	0.777	SSSSSSSSSSSSSS
48 1.33	1.777	SSSSSSSSSS	SSSSSSSSSS	1.777	SSSSSSSSSSSSSS
49 1.33	0.000	SSSSSSSSSS	SSSSSSSSSS	0.777	SSSSSSSSSSSSSS
50 0.30	0.000	SSSSSSSSSS	SSSSSSSSSS	1.777	SSSSSSSSSSSSSS
AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
24.40	347.085	SSSSSSSSSS	SSSSSSSSSS	0.516	SSSSSSSSSSSSSS
SD 17.35	246.815	SSSSSSSSSS	SSSSSSSSSS	1.342	SSSSSSSSSSSSSS
SE 2.45	34.905	SSSSSSSSSS	SSSSSSSSSS	0.348	SSSSSSSSSSSSSS

DATE 12/14/78
 MOBILE TYPE SAMPLE # 19 JPL # 5-685 (18-67-1) SPEC .A
 DISLOCATION PITS ONLY
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 .31 MM STEP SIZE
 AVERAGE DISLOCATION PIT AREA = 5.11 μ^2 .

MAG-833.1 UNITS-MICRONS CAL. FACTOR- 1.375111 UNITS/ μ^2
 FRAME AREA- 3.515625111 μ^2

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	3461.73	3.398	24.144	22.639	1.173	4.413337
2	1239.25	0.035	66.821	53.449	1.129	3.498583
3	2429.43	0.369	33.627	23.977	0.361	2.934664
4	2676.34	0.376	23.644	21.473	0.375	2.869762
5	2314.34	0.366	28.639	29.944	1.359	2.716388
6	2929.43	0.383	27.444	26.127	1.358	4.928541
7	3398.87	0.397	22.844	22.242	1.171	5.731864
8	1971.73	0.056	33.869	32.117	1.051	2.529314
9	2247.17	0.064	30.899	22.514	1.367	1.316522
10	936.34	0.026	99.131	63.946	1.021	4.168407
11	792.38	0.023	125.678	58.648	1.024	1.534993
12	551.51	0.016	119.732	57.139	1.023	2.569043
13	319.25	0.009	187.876	123.581	1.112	1.736777
14	619.36	0.018	73.994	72.787	1.023	1.227193
15	1581.13	0.043	41.191	25.926	0.956	1.959391
16	468.38	0.013	163.899	95.178	1.113	2.017522
17	318.68	0.009	252.695	111.342	1.311	2.243713
18	1245.09	0.035	59.866	36.997	1.118	1.178129
19	1661.32	0.047	51.568	51.258	1.331	4.672465
20	2761.73	0.079	33.045	23.498	1.063	5.563349
21	5199.81	0.148	16.932	15.591	0.999	4.632188
22	332.64	0.009	154.448	69.599	1.311	1.859163
23	8225.28	0.063	29.593	28.705	1.056	1.297279
24	3842.08	0.109	22.541	21.722	1.072	4.911744
25	592.08	0.017	314.531	71.347	1.113	5.316642
26	915.47	0.026	155.215	98.374	0.937	7.336694
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	1834.59	0.351	83.415	48.817	0.943	3.458368
SD	1257.89	0.036	67.574	32.144	1.126	1.561361
SE	246.69	0.037	13.252	5.912	1.115	1.136218

27	1272.83	0.036	211.149	71.173	1.145	11.104176
28	725.42	1.121	297.887	50.143	1.119	14.632411
29	2777.42	1.179	27.636	35.834	1.142	3.677191
30	1696.98	1.048	47.661	42.828	1.337	1.066921
31	1764.72	0.158	39.338	19.814	1.343	2.736118
32	7236.23	0.206	12.191	12.421	1.136	5.778752
33	4881.51	1.119	21.453	23.539	1.171	12.947510
34	10296.42	0.293	13.392	13.113	1.154	12.768797

LAST FIELD DELETED

34	4431.32	0.126	16.353	16.479	1.399	1.536732
35	5183.38	0.147	15.271	15.968	1.197	4.651877
36	3754.72	0.107	19.438	19.374	1.083	4.499396
37	3129.25	0.089	28.069	28.828	1.163	8.879840
38	686.63	0.023	184.151	71.293	1.023	2.264311
39	1799.25	0.051	51.568	36.958	0.939	4.688811
40	3485.16	0.097	22.105	22.308	1.374	4.488838
41	3698.11	0.105	19.683	21.777	0.178	5.180921
42	2728.94	0.377	22.849	21.782	1.371	2.852255
43	2386.79	0.068	24.953	23.538	1.369	2.207189
44	3594.34	0.102	22.514	22.961	1.072	4.532876
45	4483.96	0.128	19.495	18.978	1.381	4.489229
46	5053.21	0.172	17.345	17.569	1.199	2.496292
47	3736.44	0.377	20.257	23.919	1.381	1.917152
48	7914.53	1.225	11.944	11.451	1.145	5.416713
49	7799.43	1.222	9.749	11.184	1.158	3.812399
50	6943.40	0.198	13.653	15.635	0.111	7.747996

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
2759.88	0.078	63.657	37.958	1.959	4.897384
SD 1991.82	0.357	69.223	26.136	1.035	2.347141
SE 281.57	1.118	9.789	1.139	1.115	1.433185

DATE 12/14/78
 MOBIL TYCO SAMPLE # 23 JPL # 5-685-(18-63-1) SPEC .3
 TWINS ONLY
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 .31 MM STEP SIZE
 ITEM OUT PUT DATA DIVIDED BY 100
 AVERAGE TWIN AREA = 27.22 X 100

MAG-800.3 UNITS-MM CAL. FACTOR- 3.870313 3.893375 NITS/PP
 FRAME AREA-

FIELD	NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
1	12.49	177.647	15.625	4.360	0.251	1.000006
2	13.30	189.142	7.212	2.500	1.464	1.000006
3	25.53	363.132	13.393	1.524	3.683	1.000005
4	33.80	483.692	7.813	1.339	4.797	1.000016
5	22.30	317.152	8.152	2.004	1.477	1.000009
6	21.75	309.315	7.813	2.757	1.403	1.000009
7	24.28	345.367	9.375	2.107	3.517	1.000008
8	43.13	613.435	7.500	1.319	1.340	1.000007
9	71.68	1019.381	5.515	1.042	1.029	1.000012
10	27.52	391.346	6.250	1.894	3.603	1.000011
11	12.49	177.647	10.417	3.989	0.293	1.000007
12	51.33	725.741	3.989	1.108	1.107	1.000013
13	28.94	297.823	7.813	2.107	1.536	1.000007
14	40.41	574.741	4.261	1.109	1.333	1.000009
15	0.00	0.000	55555555	55555555	1.000	5555555555
16	6.87	97.706	18.750	6.048	3.163	1.000007
17	4.89	69.491	14.423	6.466	3.192	1.000013
18	4.22	60.087	23.438	9.375	4.147	1.000003
19	0.00	0.000	55555555	55555555	0.000	5555555555
20	0.00	0.000	55555555	55555555	0.000	5555555555
21	2.17	30.827	37.500	31.250	0.053	1.000003
22	0.00	0.000	55555555	55555555	0.000	5555555555
23	0.00	0.000	55555555	55555555	0.000	5555555555
24	0.00	0.000	55555555	55555555	0.000	5555555555
25	1.76	25.083	37.500	26.786	1.051	1.000002
26	4.22	60.087	37.500	11.719	1.131	1.000003

AVERAGE						
	NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
SD	17.11	243.330	55555555	55555555	1.381	5555555555
SE	3.67	51.253	55555555	55555555	1.172	5555555555

27	24.72	351.637	7.813	2.387	3.496	1.000017
28	16.75	238.256	4.363	2.387	1.557	1.000017
29	2.53	35.529	46.875	15.625	1.369	1.000011
30	26.52	377.239	9.375	2.338	1.557	1.000011
31	25.32	355.817	7.813	2.181	1.515	1.000017
32	5.11	72.626	23.438	9.375	1.128	1.000011
33	19.65	279.533	11.719	2.641	1.027	1.000010
34	5.99	85.166	18.753	7.543	1.155	1.000016
35	7.85	109.318	15.625	4.688	0.253	1.000015
36	0.00	0.000	55555555	55555555	0.000	5555555555
37	29.32	416.948	3.024	1.399	3.885	1.000010
38	0.66	9.405	55555555	55555555	0.016	1.000003
39	4.59	65.311	26.786	12.500	3.399	1.000004
40	2.79	39.709	18.750	12.500	0.115	1.000005
41	0.00	0.000	55555555	55555555	0.000	5555555555
42	0.00	0.000	55555555	55555555	0.000	5555555555
43	3.53	50.159	31.250	14.417	1.115	1.000003
44	0.33	0.000	55555555	55555555	1.000	5555555555
45	17.93	254.976	5.859	2.757	1.451	1.000017
46	29.98	426.353	6.944	1.389	1.704	1.000017
47	15.33	213.699	9.868	4.466	1.295	1.000020
48	17.67	251.318	6.944	3.753	1.339	1.000013
49	27.66	393.436	6.148	2.641	1.461	1.000013
50	13.73	152.568	13.193	4.464	1.261	1.000017

AVERAGE						
	NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
SD	14.76	209.916	55555555	55555555	0.316	5555555555
SE	2.17	38.847	55555555	55555555	1.345	5555555555

DATE 12/14/78
 MOBIL TYCO SAMPLE # 29 JPL # 5-485 (18-63-1) SPEC . 1
 DISLOCATION PITS ONLY
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 .31 MM STEP SIZE
 AVERAGE DISLOCATION PIT AREA = 5.15 PP

MAG-800.0 UNITS-MICRONS CAL. FACTOR- 3.375000 UNITS/PP
 FRAME AREA- 3.115625000 04.

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1 2508.78	0.371	28.133	29.449	0.057	3.773145
2 2724.08	0.377	23.719	24.929	0.066	3.863321
3 267.96	0.008	171.793	174.581	0.013	1.155134
4 952.04	0.027	196.954	47.807	0.018	12.312221
5 1645.44	0.047	35.446	37.232	0.046	2.139419
6 2973.68	0.084	26.989	27.190	0.059	3.787715
7 1703.11	0.048	59.111	41.946	0.031	5.606463
8 424.27	0.012	127.551	129.848	0.013	1.726211
9 465.05	0.013	100.353	100.698	0.017	1.207157
10 2554.56	0.073	34.687	37.485	0.044	5.948754
11 4587.57	0.130	20.196	18.852	0.083	5.964823
12 1593.59	0.045	43.083	37.321	0.042	2.424630
13 2099.03	0.060	39.275	37.833	0.041	4.053750
14 1529.90	0.044	45.844	41.648	0.040	3.077734
15 5828.93	0.166	15.167	15.063	0.137	6.464650
16 3015.73	0.086	23.408	24.927	0.067	3.798342
17 5149.71	0.146	14.452	15.010	0.110	4.053821
18 6860.78	0.195	12.779	12.257	0.125	5.804560
19 9327.38	0.265	8.345	8.416	0.198	4.784039
20 5007.38	0.142	24.357	23.938	0.064	14.165771
21 3585.24	0.102	21.321	19.535	0.079	4.993269
22 3170.68	0.090	18.859	19.243	0.085	2.970589
23 5517.28	0.157	13.313	13.986	0.118	4.802547
24 4701.75	0.134	12.239	12.853	0.132	2.641655
25 6092.62	0.173	13.136	12.917	0.123	5.303354

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
3371.02	0.096	45.216	38.582	0.071	4.612922
SD 2223.39	0.063	49.238	38.664	0.045	2.951862
SE 444.62	0.113	9.442	7.733	0.099	1.590772

26 4828.91	0.137	15.153	14.953	0.113	4.752179
27 2994.95	0.085	27.193	23.919	0.064	6.392697
28 5140.97	0.146	15.933	14.879	0.109	6.520468
29 4193.23	0.119	15.871	15.612	0.104	3.290137
30 1940.58	0.055	36.765	23.819	0.058	3.715893
31 595.92	0.017	92.365	94.289	0.018	1.699124
32 5326.72	0.151	14.687	15.557	0.137	4.877216
33 2313.98	0.066	31.208	35.099	0.049	2.535532
34 2164.85	0.062	29.828	31.715	0.055	2.516578
35 6359.03	0.181	10.794	11.362	0.149	4.268145
36 7674.95	0.218	12.924	12.394	0.135	9.566857
37 3995.73	0.114	16.158	14.259	0.107	3.226066
38 6142.52	0.175	10.846	10.942	0.149	4.228642
39 5711.65	0.162	14.341	13.178	0.119	4.855029
40 4381.17	0.125	17.967	19.191	0.091	4.450101
41 5988.54	0.170	13.811	14.761	0.113	5.517832
42 4290.68	0.122	18.426	18.437	0.086	4.825141
43 2390.10	0.068	33.566	24.026	0.059	3.489825
44 4625.24	0.132	19.184	19.798	0.085	5.145449
45 5072.82	0.144	14.630	15.145	0.111	4.059479
46 1841.17	0.052	37.143	36.507	0.043	2.807171
47 3177.86	0.190	19.113	20.447	0.084	2.437997
48 1852.23	0.053	35.034	38.265	0.044	2.783033
49 2743.69	0.078	28.971	29.895	0.057	3.586699
50 5086.83	0.145	16.667	17.946	0.096	5.109505

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
3702.18	0.105	34.576	31.313	0.079	4.435467
SD 2017.23	0.057	38.164	30.695	0.040	2.380339
SE 285.28	0.008	5.397	4.341	0.006	1.336627

DATE 12/16/78
 MOBILE TYCO SAMPLE #21 JPL 5-685 (18-53-1) SPEC. 1
 TWINS ONLY
 ATM OUTPUT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 31.14X10

AG-830.3 UNITS-MM CAL. FACTOR- 0.373313 0.333375 UNITS/20

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	0.33	0.333	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSSSS
LAST FIELD DELETED						
1	52.53	747.393	6.466	1.793	1.176	1.333377
2	46.54	661.873	6.944	1.179	3.776	1.000009
3	59.55	846.989	4.464	1.250	7.888	1.333014
4	37.66	436.341	8.152	1.003	0.619	1.333008
5	0.33	0.333	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSSSS
6	11.88	169.819	6.250	2.933	3.429	1.000005
7	18.61	264.655	7.212	2.373	2.475	0.000011
8	9.42	133.984	11.719	3.409	0.331	1.000004
9	18.51	263.234	19.417	2.467	3.448	1.000007
10	0.33	0.000	SSSSSSSSSS	SSSSSSSSSS	3.333	SSSSSSSSSSSSSS
11	9.89	140.613	18.417	3.906	3.309	1.000006
12	28.16	400.533	14.423	1.894	1.563	1.000008
13	13.78	196.095	17.045	3.024	3.352	0.000006
14	7.49	136.525	62.300	9.868	4.112	0.000016
15	71.84	1021.690	6.696	1.250	0.877	1.000014
16	75.30	1070.928	6.048	3.889	1.211	1.000013
17	57.86	822.844	6.250	1.157	0.907	0.000010
18	57.82	822.370	6.944	3.884	1.205	0.000008
19	30.16	428.939	8.152	1.875	3.592	0.000009
20	30.36	431.780	6.250	0.995	4.621	0.000011
21	60.42	859.299	3.289	3.833	1.317	1.000009
22	19.27	274.123	5.515	2.107	3.639	0.000006
23	29.73	422.784	3.827	1.953	0.656	0.000031
24	11.75	167.125	18.750	4.167	0.261	0.000007
25	28.30	402.426	5.859	1.856	0.605	1.000013
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	31.19	443.635	SSSSSSSSSS	SSSSSSSSSS	1.613	SSSSSSSSSSSSSS
SD	22.22	315.972	SSSSSSSSSS	SSSSSSSSSS	1.767	SSSSSSSSSSSSSS
SE	4.44	63.194	SSSSSSSSSS	SSSSSSSSSS	1.372	SSSSSSSSSSSSSS
26	12.62	179.435	6.944	2.568	1.501	1.000005
27	16.91	247.509	8.523	2.534	0.445	1.000007
28	30.06	427.519	6.696	1.769	7.632	1.000010
29	14.55	236.895	14.423	5.368	1.229	1.000015
30	36.98	525.995	5.682	1.176	1.741	1.000011
31	31.39	432.253	4.360	1.187	0.949	1.000011
32	4.69	66.755	18.750	6.466	1.184	1.000005
33	56.09	797.751	4.076	1.442	0.856	1.000018
34	28.66	407.634	5.859	2.717	0.459	0.000000
35	3.76	53.499	37.500	23.438	0.053	0.000016
36	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.003	SSSSSSSSSSSSSS
37	3.86	54.919	23.438	9.868	3.123	0.000004
38	27.46	390.590	6.048	2.373	3.496	0.000009
39	7.62	108.418	9.375	3.750	0.325	0.000003
40	7.22	102.737	26.786	7.500	1.152	0.000006
41	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	7.000	SSSSSSSSSSSSSS
42	1.66	23.672	37.500	26.786	1.356	1.000002
43	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
44	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
45	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
46	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
47	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
48	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
49	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
50	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	21.25	302.189	SSSSSSSSSS	SSSSSSSSSS	1.431	SSSSSSSSSSSSSS
SD	21.37	343.902	SSSSSSSSSS	SSSSSSSSSS	1.376	SSSSSSSSSSSSSS
SE	3.02	42.978	SSSSSSSSSS	SSSSSSSSSS	0.053	SSSSSSSSSSSSSS

DATE 12/16/78
 MOBILE (YC) SAMPLE # 21 JPL 9-685 (19-43-1) PEO C
 DISLOCATION SITES
 DISLOCATION PITS
 .01 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT SIZE = 5.91 μ

MAG-800.3 UNITS-MICRONS CAL. FACTOR- 1.375000 UNITS/ μ P
 FRAME AREA- 3.515625000 94

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	1351.42	1.139	14.559	34.772	1.147	1.748793
2	1206.09	0.034	18.375	37.681	1.145	1.581333
3	12.18	0.000	1232.759	1929.688	0.001	1.125033
4	3794.25	0.108	14.754	15.402	1.198	1.115983
5	4175.80	0.119	15.185	15.677	1.196	4.141389
6	143.32	0.004	333.630	357.647	1.095	2.018833
7	0.00	0.000	55555555	55555555	1.000	5555555555
8	28.14	0.001	2083.333	2286.585	1.093	1.673438
9	487.65	1.014	422.297	82.021	1.119	12.655339
10	45.85	0.001	1320.423	616.776	1.032	1.199918
11	685.45	0.019	68.581	68.883	1.024	1.735814
12	263.62	0.007	182.039	182.039	1.099	1.841124
13	1803.51	0.051	32.883	31.125	1.153	2.536255
14	5425.55	0.154	11.692	11.869	1.141	3.738923
15	5354.82	1.132	13.467	10.467	1.157	1.711282
16	6424.47	0.183	10.813	11.288	1.153	5.195731
17	1852.96	0.053	33.057	32.106	0.050	3.333300
18	7549.07	0.215	10.446	10.875	1.148	7.949421
19	5751.95	0.164	11.597	11.830	1.138	4.737766
20	322.00	0.009	176.222	172.973	1.008	3.263529
21	1895.77	0.054	29.866	30.992	1.055	2.823589
22	6945.18	0.198	12.350	12.619	1.127	7.584880
23	931.13	0.026	127.205	62.045	0.021	6.558130
24	0.00	0.000	55555555	55555555	1.000	5555555555
25	40.44	1.001	1157.477	1053.371	1.102	1.292668

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2259.42	1.164	55555555	55555555	1.157	5555555555
SD	2577.59	1.071	55555555	55555555	1.157	5555555555
SE	501.52	0.114	55555555	55555555	1.111	5555555555

26	313.32	0.109	156.519	183.135	1.011	2.147279
27	903.38	1.326	50.457	51.713	1.134	1.455333
28	1500.51	0.143	39.128	33.626	1.147	2.581917
29	414.89	0.112	159.713	77.734	1.112	1.856514
30	2539.93	1.072	29.269	19.353	1.191	1.010115
31	3435.33	1.198	19.353	19.353	1.181	1.517133
32	2889.68	1.182	23.638	27.194	1.163	1.471471
33	1271.40	0.036	40.957	40.167	1.042	1.113313
34	4082.74	0.116	14.123	14.436	1.114	3.231563
35	1375.47	0.039	32.895	31.002	0.052	1.858765
36	745.85	0.021	63.473	59.037	1.029	1.538151
37	1711.17	0.049	26.874	29.133	1.158	2.232561
38	1536.38	1.344	30.301	31.323	1.053	1.976507
39	2168.70	0.062	23.408	22.838	1.071	2.150824
40	2519.29	1.072	18.453	18.325	1.089	2.015174
41	1680.54	0.048	19.079	12.328	1.144	1.816086
42	4574.62	0.130	14.419	13.666	1.114	4.252727
43	3095.43	0.088	15.344	15.524	1.107	1.965312
44	4932.32	0.140	12.424	13.540	1.126	4.037697
45	3391.71	1.088	16.602	17.442	0.198	1.316952
46	2138.75	1.161	24.897	25.403	1.065	2.528450
47	2022.50	1.058	29.583	33.280	1.045	3.437389
48	4146.70	1.118	13.273	13.384	1.126	2.581496
49	7962.94	0.227	8.365	8.717	1.189	1.884098
50	6489.85	0.185	13.685	13.524	1.153	0.975712

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2480.51	0.071	55555555	55555555	1.067	5555555555
SD	2203.60	0.163	55555555	55555555	1.051	5555555555
SE	311.64	0.009	55555555	55555555	1.007	5555555555

DATE 12/18/78
 MOBIL TYCO SAMPLE # 22 JPL 5-495 (17-53-1) SPEC 1
 TWIN ONLY
 TEM OUT PUT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 26.63X100

MAG-500.3 UNITS-MM CAL. FACTOR- 3.330375 UNITS/°
 FRAME AREA- 3.372313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	72.06	1024.876	3.348	1.453	1.835	1.111122
2	22.72	323.111	8.152	1.894	1.568	1.111115
3	47.95	682.004	5.768	2.259	1.525	1.111123
4	24.67	350.882	6.696	2.259	1.536	1.111117
5	12.39	171.977	13.417	3.410	1.334	1.111136
6	2.97	42.191	31.250	13.193	1.393	1.111106
7	1.80	25.635	46.875	12.500	1.069	1.111132
8	39.47	561.385	3.472	1.419	1.845	1.111111
9	55.43	788.284	6.250	1.705	0.659	1.111116
10	4.06	57.679	31.250	13.417	0.131	1.111135
11	1.65	23.499	93.753	31.250	1.140	1.111136
12	9.73	138.324	9.375	5.168	1.248	1.111137
13	6.50	92.394	13.393	6.250	0.249	1.111135
14	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.333	SSSSSSSSSSSSSS
15	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.333	SSSSSSSSSSSSSS
16	4.43	63.020	23.438	11.719	1.109	1.111134
17	0.98	13.886	187.500	31.250	1.129	1.111104
18	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
19	23.17	286.794	8.523	3.827	1.315	1.111119
20	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSSSS
21	7.21	132.541	14.423	18.523	1.155	1.111107
22	1.80	25.635	62.500	26.786	1.051	1.111107
23	5.29	75.304	15.625	7.813	1.149	1.111105
24	5.37	76.372	26.786	9.468	0.117	1.111107
25	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
26	6.80	96.666	15.625	5.859	1.195	1.111135
27	1.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
28	4.12	57.145	17.131	15.625	1.188	1.111134

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	12.76	181.411	SSSSSSSSSS	SSSSSSSSSS	1.225	SSSSSSSSSSSSSS
SE	18.52	263.442	SSSSSSSSSS	SSSSSSSSSS	1.257	SSSSSSSSSSSSSS
	3.50	49.786	SSSSSSSSSS	SSSSSSSSSS	1.348	SSSSSSSSSSSSSS

29	60.05	853.974	4.167	1.218	1.896	1.111116
30	24.22	353.119	9.152	1.183	1.536	1.111112
31	43.48	575.725	6.944	2.41	1.441	1.111119
32	16.97	241.399	8.929	3.676	1.323	1.111111
33	19.68	279.851	8.152	3.360	1.531	1.111130
34	19.34	275.045	8.152	2.534	1.453	1.111105
35	30.42	432.195	7.813	1.512	1.709	1.111109
36	9.46	134.585	13.417	4.261	0.280	1.111106
37	23.62	335.929	4.808	2.467	0.512	1.111118
38	22.16	315.100	4.934	2.534	1.504	1.111110
39	36.50	519.114	7.212	2.107	1.531	1.111112
40	13.93	198.139	18.750	4.261	1.251	1.111113
41	5.41	76.936	17.745	6.696	1.176	1.111134
42	25.15	356.223	5.368	1.974	1.581	1.111117
43	4.88	69.429	26.786	8.523	1.136	1.111105
44	1.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.000	SSSSSSSSSSSSSS
45	2.19	29.918	62.500	18.750	1.364	1.111104
46	3.94	56.077	62.533	23.438	1.353	1.111107
47	1.65	23.499	46.875	46.875	1.048	1.111132
48	8.19	116.427	14.423	4.934	1.229	1.111136
49	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	1.100	SSSSSSSSSSSSSS
50	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSSSSSS

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	14.52	206.449	SSSSSSSSSS	SSSSSSSSSS	1.271	SSSSSSSSSSSSSS
SE	17.26	245.486	SSSSSSSSSS	SSSSSSSSSS	1.257	SSSSSSSSSSSSSS
	2.44	34.717	SSSSSSSSSS	SSSSSSSSSS	1.336	SSSSSSSSSSSSSS

DATE 12/18/78
MOBIL TYCO SAMPLE # 22 JPL 4-695 (48-63-1) SPEC
DISLOCATION PITS ONLY
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
AVERAGE DIASLOCATED DISLOCATION PIT AREA = 7.3

MAG-833.7 UNITS-MICRONS CAL. FACTOR-
FRAME AREA- 3.515625000 34

1.375337 UNITS/PP

FIELD NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
1 743.42	0.321	45.466	51.118	7.335	1.467638
2 489.86	0.314	112.141	51.637	7.122	3.332298
3 721.78	0.021	45.422	61.516	7.027	2.135312
4 2901.78	0.083	26.364	19.858	7.075	6.724288
5 1113.15	0.432	39.593	47.779	7.441	2.457463
6 5894.38	0.168	13.163	13.666	7.121	8.756876
7 8933.84	0.254	11.269	13.713	7.148	28.563196
8 1527.12	0.043	53.756	23.898	7.363	4.945196
9 683.15	0.319	128.425	51.890	7.127	8.552431
10 1849.86	0.053	37.355	34.391	7.046	4.181512
11 6406.58	0.182	12.862	12.503	7.126	8.139542
12 3252.33	0.393	21.823	19.483	7.074	5.097281
13 1287.40	0.037	31.198	28.584	0.055	7.294434
14 5595.21	0.159	11.713	11.416	0.137	5.643735
15 5381.23	0.145	12.569	13.249	7.125	5.732091
16 6936.44	0.197	15.491	16.479	0.131	16.937584
17 4468.22	0.127	12.771	12.592	7.126	4.905782
18 2671.64	0.076	18.743	18.966	0.088	3.307372
19 5161.78	0.147	16.039	15.788	7.133	12.526928
20 4636.30	0.132	13.387	14.524	7.122	6.320655
21 4523.01	0.129	14.681	14.256	7.119	6.586037
22 5113.42	0.145	12.429	11.815	7.134	6.103779
23 3352.33	0.395	16.164	17.715	7.095	4.492657
24 3886.85	0.111	15.612	14.881	7.109	3.911857
25 2545.34	0.072	17.058	17.963	7.095	2.417163

AVERAGE

NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
3591.06	0.102	30.207	24.773	0.088	6.260164
SD 2214.33	0.363	29.311	16.580	7.139	4.363578
SE 442.81	0.013	5.862	3.316	1.098	1.872716

26 2315.37	0.066	21.606	24.828	1.083	1.135347
27 8747.67	0.249	7.374	7.284	1.191	2.431563
28 1184.66	0.334	33.784	34.353	1.348	1.987132
29 261.37	0.037	207.412	97.869	1.015	1.958485
30 1224.38	0.035	36.380	32.837	0.348	2.714273
31 507.53	0.014	102.124	77.801	7.020	2.126594
32 6347.40	0.172	12.069	12.427	7.132	7.372959
33 3592.33	0.102	16.167	17.354	1.397	4.364271
34 2138.36	0.358	24.782	23.983	7.167	3.264431
35 2321.78	0.158	23.562	24.937	1.169	2.866691
36 4332.63	0.122	14.220	13.472	7.129	4.800968
37 1862.33	0.053	25.524	23.800	7.067	2.950304
38 5075.48	0.144	12.094	13.204	7.128	6.115372
39 2860.82	0.081	17.233	18.660	7.091	3.383425
40 1384.38	0.339	34.029	34.442	7.047	2.736964
41 5947.40	0.162	9.756	10.630	7.156	6.128350
42 292.74	0.008	180.288	159.710	0.009	4.553267
43 5503.42	0.157	12.344	11.738	7.140	4.201547
44 5690.14	0.162	15.155	10.529	0.157	5.373764
45 5767.67	0.164	10.568	10.992	0.151	5.013442
46 894.11	0.025	40.514	41.501	0.342	1.696598
47 7141.23	0.293	12.569	12.442	0.127	13.937114
48 1687.55	0.348	30.119	21.463	7.163	1.242834
49 5793.14	0.165	11.005	12.255	7.138	7.813693
50 7860.82	0.224	9.575	10.184	7.163	17.537324

AVERAGE

NO.	NO./AREA	MFPV	MFRH	L/A	AFETA
3595.42	0.132	33.407	27.558	1.091	5.573754
SD 2368.91	0.367	21.192	26.641	7.045	3.777526
SE 335.31	0.013	5.825	3.768	0.006	1.534023

ORIGINAL PAGE IS
OF POOR QUALITY

DATE 12/18/78
 MOBIL TYCO SAMPLE # 23 JPL # 5-685 (19-63-1) SPEC 7
 TWINS ONLY
 OFM OUT PUT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 31.65X100

MAG-500.3 UNITS-MM CAL. FACTOR- 0.100375 UNITS/PO
 FRAME AREA- 3.370313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	3.52	50.114	23.438	9.868	1.123	1.111114
2	11.78	167.511	23.833	5.115	1.197	1.111114
3	14.49	206.325	11.719	2.679	1.397	1.111114
4	18.59	263.130	13.393	2.344	1.448	1.111114
5	14.36	199.993	8.929	2.939	1.419	1.111114
6	65.94	937.785	5.859	1.442	1.755	1.111118
7	49.76	737.631	5.288	1.311	1.867	1.111113
8	26.69	379.569	6.696	1.913	1.693	1.111112
9	44.96	639.429	4.464	1.258	1.885	1.111119
10	62.15	883.959	3.906	1.139	1.843	1.111113
11	30.73	436.643	4.076	1.616	1.741	1.111117
12	23.56	335.323	6.258	1.873	1.638	1.111118
13	21.60	337.181	6.348	1.995	1.549	1.111117
14	19.15	272.383	15.625	2.757	1.387	1.111118
15	31.58	449.172	5.682	1.320	1.813	1.111117
16	35.92	513.885	5.582	1.736	1.651	1.111115
17	33.38	473.517	8.152	1.465	1.728	1.111113
18	23.82	296.345	9.375	2.306	1.477	1.111117
19	16.61	236.186	9.868	2.259	1.480	1.111116
20	49.59	705.311	4.464	1.445	1.734	1.111114
21	39.67	564.249	6.466	2.155	1.531	1.111112
22	52.19	741.049	4.276	1.992	1.117	1.111111
23	44.47	632.460	3.233	1.320	1.899	1.111115
24	22.90	325.742	6.944	1.838	1.605	1.111117
25	30.77	437.571	5.868	1.410	1.789	1.111118
26	32.69	464.948	5.859	1.803	1.632	1.111112

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	31.43	446.941	8.127	2.266	1.625	1.111111
SD	15.61	221.952	5.114	1.747	1.221	1.111114
SE	3.36	43.528	9.983	3.343	1.343	1.111111

27	11.81	167.975	5.859	2.641	1.451	1.111117
28	10.34	147.094	8.152	1.676	1.328	1.111116
29	14.88	211.593	5.208	3.324	1.448	1.111111
30	6.26	89.092	13.393	5.515	1.219	1.111117
31	7.47	116.261	13.393	5.768	1.249	1.111115
32	11.91	169.167	1.838	2.568	1.337	1.111117
33	5.19	73.779	18.751	11.719	1.115	1.111114
34	10.05	427.363	5.238	1.533	1.691	1.111117
35	20.36	289.549	6.250	2.259	1.549	1.111119
36	35.69	506.246	4.808	1.500	1.757	1.111115
37	18.73	266.348	3.676	2.155	1.635	1.111112
38	0.52	7.424	187.500	31.250	1.019	1.111112
39	0.00	0.000	55555555	55555555	1.000	55555555
40	9.27	131.782	15.625	5.357	1.219	1.111113
41	0.00	0.000	55555555	55555555	1.000	55555555
42	11.71	166.583	37.500	8.929	1.125	1.111117
43	1.47	20.881	187.500	31.250	1.035	1.111116
44	1.96	27.841	37.500	18.750	1.169	1.111118
45	8.74	124.357	31.250	6.944	0.157	1.111118
46	0.00	0.000	55555555	55555555	0.000	55555555
47	4.14	58.931	23.438	13.393	1.383	1.111116
48	3.62	8.816	187.500	46.875	1.024	1.111113
49	3.62	51.506	23.438	11.719	1.134	1.111114
50	6.26	89.092	13.393	5.859	1.195	1.111115

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	20.76	295.247	55555555	55555555	1.444	55555555
SD	17.33	242.224	55555555	55555555	1.294	55555555
SE	2.41	34.256	55555555	55555555	1.342	55555555

DATE 12/18/78
 MORIL TYCO, SAMPLE # 23 JPL # 5-685 (12-63-1) SPEC #
 DISLOCATION PITS ONLY
 .31 NM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE INLJ
 AVERAGE DISLOCATION PIT AREA = 6.31 μ^2

MAG-839.3 UNITS-MICRONS CAL. FACTOR- 1.375133 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	5588.19	0.159	9.834	19.315	1.162	3.555488
2	3276.54	0.093	23.983	25.713	1.156	3.757672
3	2741.13	0.078	19.254	20.367	0.784	2.741695
4	2540.10	0.072	20.253	23.125	0.379	2.377388
5	3742.76	0.106	16.416	18.426	0.092	3.886918
6	139.15	0.303	343.407	334.821	0.105	1.036517
7	726.12	0.021	169.530	37.666	0.025	3.958705
8	803.66	0.023	91.463	49.867	0.026	2.684659
9	277.20	0.008	296.677	79.915	0.016	5.093071
10	321.63	0.009	167.719	114.199	0.112	2.922883
11	1633.93	0.046	32.161	35.714	0.349	2.356141
12	4281.70	0.122	18.743	23.825	0.072	7.618322
13	945.42	0.027	49.368	55.770	0.032	1.744610
14	1548.75	0.144	33.650	36.722	0.043	2.644318
15	221.96	0.006	226.998	76.656	1.011	2.374604
16	615.81	0.018	55.804	61.556	0.024	1.487339
17	1851.75	0.053	45.663	36.267	0.045	3.972121
18	385.52	0.011	171.389	52.876	0.023	2.585938
19	636.44	0.018	100.375	83.934	0.018	2.744349
20	664.89	0.019	68.833	59.411	0.026	1.702841
21	1675.54	0.048	26.687	27.056	0.060	2.302961
22	1035.61	0.029	56.749	37.757	0.037	2.171836
23	2113.81	0.160	29.288	27.041	0.057	3.900655
24	2098.34	0.060	33.578	44.138	0.045	4.679213
25	958.37	0.027	95.458	43.183	0.026	2.797963
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	1630.52	0.146	87.731	56.292	0.345	3.618272
SD	1379.23	0.035	89.570	61.497	0.033	2.333934
SE	275.84	0.008	17.914	12.281	1.037	1.466781
26	534.28	0.015	171.733	131.242	0.016	9.677383
27	4658.90	0.133	14.839	14.339	0.119	4.331524
28	2997.18	0.085	17.196	18.119	0.089	2.610715
29	5217.97	0.148	12.696	14.222	0.120	4.783380
30	1531.73	0.043	36.678	36.239	0.044	2.923639
31	1786.72	0.051	33.547	31.662	0.050	3.433611
32	3255.24	0.093	16.619	15.844	0.075	1.24719
33	879.87	0.025	67.360	44.345	0.026	2.527763
34	925.99	0.026	78.321	40.832	0.031	1.525586
35	1475.37	0.042	35.351	30.261	0.051	2.164795
36	1587.03	0.045	45.888	35.458	0.051	2.196340
37	1842.60	0.052	36.678	35.191	0.044	5.407227
38	5036.74	0.143	15.222	16.028	0.102	5.514249
39	2777.23	0.079	19.426	22.574	0.077	2.784008
40	2348.99	0.067	24.332	25.812	0.066	3.340949
41	4311.81	0.123	15.938	18.803	0.091	6.187022
42	1234.44	0.035	57.375	49.973	0.030	4.311144
43	1484.03	0.042	28.998	34.753	0.053	1.828330
44	1415.64	0.040	31.043	34.505	0.051	1.697974
45	4802.83	0.137	17.523	18.303	0.091	5.661284
46	3721.13	0.106	14.841	16.299	0.104	3.389339
47	9683.36	0.275	9.517	11.787	0.466	9.386913
48	2378.87	0.166	27.783	27.125	0.174	1.525773
49	2346.42	0.059	22.585	25.365	0.171	1.999476
50	2353.41	0.067	21.858	24.914	0.169	2.982999
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2219.78	0.063	61.126	43.298	0.058	3.750280
SD	1791.73	0.051	72.499	47.259	0.036	2.144764
SE	253.39	0.007	19.253	6.683	0.005	0.303315

DATE 12/19/78
 MORIL TYCO SAMPLE # 24 JPL # 5-685 (18-63-1) SPEED
 PAIRS ONLY
 ITEM OUT PUT DATA DIVIDED BY 111
 .31 MM SPIED SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE PAIR AREA = 15.51111

MAG-800.1 UNITS-MM CAL. FACTOR- 1.11375 UNITS/IN
 FRAME AREA- 3.771313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	6.33	93.365	8.929	4.376	0.296	1.333334
2	4.73	67.248	11.329	7.212	1.211	1.333332
3	2.36	33.624	23.438	13.417	1.141	1.333332
4	10.02	142.532	7.212	4.176	1.337	1.333336
5	21.47	447.522	5.515	1.829	1.595	1.333312
6	32.17	457.529	6.456	2.314	1.563	1.333312
7	28.29	431.388	4.464	1.399	1.797	1.333307
8	25.19	358.257	5.208	1.953	1.592	1.333338
9	93.38	1323.751	2.434	1.143	1.361	1.333331
10	14.02	199.343	4.688	2.534	1.496	1.333336
11	26.79	381.374	4.688	1.488	1.763	1.333310
12	44.16	628.351	4.360	1.537	1.728	1.333315
13	56.43	832.577	2.976	1.896	1.337	1.333312
14	24.15	343.447	3.906	1.721	1.717	1.333338
15	19.28	274.197	5.682	2.236	1.544	1.333317
16	18.38	261.388	11.329	3.289	1.341	1.333310
17	25.58	363.862	4.934	1.829	1.635	1.333339
18	28.16	199.387	5.368	1.752	1.645	1.333311
19	15.87	225.762	6.253	2.568	1.456	1.333339
20	14.66	238.553	5.357	2.344	1.485	1.333336
21	34.17	485.949	4.363	1.603	1.723	1.333319
22	48.44	688.895	3.289	1.154	1.984	1.333312
23	49.39	782.585	3.676	1.724	1.717	1.333322
24	41.18	585.621	3.538	2.316	1.643	1.333321
25	18.15	258.184	5.515	1.752	1.632	1.333336
26	29.38	417.983	4.261	1.399	1.808	1.333327
27	5.18	73.653	9.868	5.357	1.245	1.333335

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	27.66	393.394	6.224	2.447	1.597	1.333313
SD	19.33	273.238	4.344	2.346	1.236	1.333336
SE	3.66	52.117	1.778	1.394	1.145	1.111111

28	3.33	3.333	SSSSSSSSSS	SSSSSSSSSS	1.111	SSSSSSSSSSSS
29	11.15	158.514	6.944	2.679	1.443	1.333336
30	9.67	136.498	6.466	3.753	1.373	1.333333
31	13.34	189.736	5.238	2.373	1.539	1.333316
32	5.38	76.455	11.329	8.152	1.189	1.333334
33	15.62	222.163	5.682	2.717	1.443	1.333337
34	43.77	622.447	4.376	1.875	1.643	1.333327
35	36.39	517.572	4.934	1.136	1.969	1.333313
36	26.41	375.473	4.573	1.752	1.685	1.333339
37	19.84	282.293	4.688	1.974	1.629	1.333311
38	48.24	686.393	3.827	1.512	1.787	1.333317
39	62.14	883.835	4.076	1.369	1.827	1.333318
40	47.28	671.282	3.348	1.893	1.737	1.333321
41	7.33	3.333	SSSSSSSSSS	SSSSSSSSSS	1.333	SSSSSSSSSSSS
42	3.86	54.839	26.786	18.753	1.372	1.333313
43	15.31	217.757	4.464	2.316	1.633	1.333338
44	6.32	85.662	11.719	6.694	1.299	1.333336
45	3.94	56.343	25.786	14.423	1.393	1.333313
46	7.14	100.372	13.417	8.523	1.171	1.333312
47	8.32	114.382	12.137	5.466	1.197	1.333317
48	7.99	113.682	5.859	3.996	1.339	1.333335
49	21.84	317.623	3.676	2.641	1.475	1.333312
50	2.98	42.433	23.438	9.375	1.125	1.333333

	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	23.26	330.782	SSSSSSSSSS	SSSSSSSSSS	0.512	SSSSSSSSSSSS
SD	18.84	267.888	SSSSSSSSSS	SSSSSSSSSS	0.272	SSSSSSSSSSSS
SE	2.66	17.884	SSSSSSSSSS	SSSSSSSSSS	1.338	SSSSSSSSSSSS

DATE 12/19/76
 MODEL TUCO SAMPLE # 24 JPL # 5-685 (1P-63-1) SPED
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 4.25

MAG-813.1 INITS-MICRONS CAL. FACTOR- 3.375111 INITS/PO
 FRAME AREA- 3.515625111 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1	2897.76	3.182	21.596	22.656	3.977	3.486331
2	1137.44	3.332	35.112	38.531	3.345	1.834318
3	1811.52	3.352	27.671	28.758	3.455	2.871928
4	2379.36	3.359	21.894	25.749	3.373	2.147547
5	182.88	3.335	262.635	199.745	3.337	1.747113
6	232.56	3.336	238.797	146.944	3.338	1.633314
7	579.36	3.315	74.169	58.777	3.326	1.689538
8	411.52	3.312	79.923	88.360	3.319	1.197641
9	3.33	3.333	55555555	55555555	3.333	5555555555
10	571.88	3.316	62.583	68.782	3.325	1.279253
11	332.32	3.339	98.477	138.685	3.316	1.949883
12	388.64	3.311	93.754	92.183	3.318	1.284128
13	64.64	3.332	538.793	352.444	3.334	1.136253
14	783.96	3.322	45.137	52.173	3.335	1.332797
15	286.72	3.338	135.693	115.314	3.315	3.996347
16	493.44	3.314	78.125	87.299	3.319	1.737735
17	144.48	3.334	183.638	242.248	3.337	1.741856
18	489.96	3.314	93.755	93.284	3.319	1.638445
19	331.92	3.319	194.936	134.167	3.319	2.948438
20	167.28	3.305	237.142	161.917	3.337	1.181723
21	452.16	3.313	83.185	94.221	3.318	2.453125
22	243.48	3.337	327.797	143.782	3.339	5.032346
23	979.36	3.328	55.347	52.345	3.333	2.907992
24	656.96	3.319	74.169	66.321	3.323	2.187145
25	24.96	3.331	399.254	1953.125	3.331	1.687549
26	1395.52	3.331	49.189	2.592	3.328	4.819489

AVERAGE						
	NO.	NO. AREA	MFPV	MFPH	L/A	AFETA
	644.49	3.318	55555555	55555555	3.323	5555555555
SD	674.42	3.319	55555555	55555555	3.319	5555555555
SE	132.26	3.374	55555555	55555555	3.374	5555555555

27	2346.56	3.367	23.843	23.416	3.377	2.657747
28	3219.36	3.392	14.919	14.468	3.112	2.267243
29	1224.48	3.335	51.286	46.922	3.336	2.429352
30	858.24	3.324	57.495	63.251	3.329	2.377996
31	2118.48	3.363	22.531	19.799	3.370	1.082827
32	1335.68	3.338	38.332	34.779	3.347	2.415539
33	894.38	3.325	111.698	55.737	3.322	2.938365
34	131.24	3.314	311.431	194.131	3.316	1.182399
35	132.38	3.333	347.222	282.383	3.335	1.936259
36	458.24	3.313	183.135	65.286	3.321	4.152362
37	1455.34	3.341	33.918	23.526	3.359	2.329951
38	82.48	3.302	428.382	357.824	3.334	1.178976
39	981.92	3.328	47.954	48.375	3.335	2.233815
40	1698.96	3.346	34.981	31.449	3.353	2.476576
41	3696.30	3.335	13.809	18.278	3.336	2.687216
42	3233.76	3.392	14.241	15.329	3.113	2.271927
43	3549.76	3.371	24.219	20.496	3.385	4.642718
44	4152.48	3.318	11.331	13.359	3.332	2.846834
45	1899.28	3.354	22.689	24.187	3.373	1.975437
46	3132.30	3.389	15.131	18.487	3.398	2.178577
47	783.84	3.322	55.277	48.752	3.333	1.672147
48	3379.74	3.396	14.217	16.883	3.174	2.193397
49	1138.48	3.332	37.651	32.216	3.344	1.712214
50	1349.28	3.330	45.844	49.358	3.337	2.193543

AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	1191.12	3.334	55555555	55555555	3.342	5555555555
SD	1135.95	3.332	55555555	55555555	3.374	5555555555
SE	160.65	3.305	55555555	55555555	3.305	5555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 12/19/78

MOBIL TYCO SAMPLE # 25 IPL # 5-685 (18-63-1) SPEC #

TWINS ONLY

DEM OUTPUT DATA DIVIDED BY 100

.31 MM STEP SIZE

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY

AVERAGE TWIN AREA = 29.74X100

MAG-800.3 UNITS-MM CAL. FACTOR-
FRAME AREA- 0.070313

0.001375 UNITS/PP

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	28.34	473.393	5.859	2.316	1.579	1.000013
2	32.31	459.533	3.538	1.659	0.720	1.000012
3	22.18	315.427	8.523	3.024	1.379	1.000028
4	27.08	385.077	4.167	1.537	0.739	1.000011
5	16.31	227.764	3.472	2.115	1.481	1.000016
6	13.62	193.739	6.696	2.717	3.456	1.000009
7	13.55	150.108	17.045	7.212	3.171	1.000009
8	37.83	537.987	3.750	1.974	1.627	1.000019
9	28.41	290.209	8.929	1.875	1.571	0.000007
10	22.49	319.833	5.068	1.752	0.635	1.000008
11	29.30	416.700	6.048	2.147	3.552	0.000011
12	4.11	58.442	17.045	5.682	1.216	0.000013
13	9.51	135.297	14.023	3.989	4.296	1.000016
14	27.39	389.483	4.167	1.875	1.624	1.000019
15	26.34	374.669	6.250	1.856	1.597	1.000010
16	40.36	574.313	4.838	1.913	1.589	1.000016
17	15.11	214.954	5.859	2.435	1.483	1.000009
18	1.31	14.410	46.875	37.500	1.040	1.000005
19	0.00	0.000	SSSSSSSSSS	SSSSSSSSSS	0.000	SSSSSSSSSS
20	3.52	50.836	31.250	17.045	1.193	1.000004
21	12.92	183.733	13.417	2.841	0.387	1.000016
22	12.99	186.134	6.944	2.641	0.400	1.000007
23	18.74	266.592	6.466	2.641	0.416	1.000010
24	17.82	253.382	5.859	4.167	1.328	1.000010
25	14.62	308.953	5.496	2.568	0.453	0.000008
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	18.59	264.382	SSSSSSSSSS	SSSSSSSSSS	1.417	SSSSSSSSSS
SE	13.66	151.663	SSSSSSSSSS	SSSSSSSSSS	1.213	SSSSSSSSSS
	2.13	33.333	SSSSSSSSSS	SSSSSSSSSS	1.141	SSSSSSSSSS

26	23.41	291.219	13.417	3.209	1.341	1.000011
27	27.72	394.283	5.682	1.933	0.592	1.000011
28	11.37	161.716	17.045	3.750	1.283	1.000007
29	54.26	771.755	4.573	1.723	1.672	1.000021
30	17.31	246.177	12.500	3.233	1.347	1.000010
31	19.34	274.998	11.719	2.841	1.389	1.000011
32	17.51	248.979	5.368	1.259	1.531	1.000011
33	2.17	31.822	37.500	15.625	0.183	1.000015
34	8.75	124.489	7.813	5.368	1.267	1.000019
35	11.96	179.122	8.152	3.024	1.416	1.000007
36	21.87	311.024	5.515	2.155	1.552	0.000014
37	36.31	516.371	4.688	1.442	1.779	1.000011
38	43.63	620.446	6.696	1.953	1.547	1.000020
39	25.87	367.864	5.068	1.420	0.787	0.000008
40	3.43	48.835	14.423	8.929	3.144	1.000014
41	2.84	40.429	20.833	8.152	1.176	1.000014
42	8.33	118.485	9.868	4.838	0.232	1.000007
43	50.15	713.313	3.989	1.359	1.819	1.000016
44	18.49	262.989	4.688	2.232	1.552	1.000012
45	12.89	183.332	5.859	2.717	1.437	1.000007
46	37.52	533.584	2.717	1.689	1.776	1.000021
47	7.85	111.687	11.719	3.636	1.315	1.000014
48	16.16	229.765	7.813	2.604	1.459	1.000010
49	4.19	59.643	15.625	7.813	0.155	1.000003
50	9.99	142.132	9.458	2.568	1.424	1.000015
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	19.10	271.659	SSSSSSSSSS	SSSSSSSSSS	0.447	SSSSSSSSSS
SE	12.67	180.256	SSSSSSSSSS	SSSSSSSSSS	1.207	SSSSSSSSSS
	1.79	25.492	SSSSSSSSSS	SSSSSSSSSS	1.029	SSSSSSSSSS

DATE 12/19/78
 MOBIL TYCO SAMPLE # 25 JPL # 5-485 (18-63-1) SPEC F
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.23 PP

MAG-833.3 UNITS-MICRONS CAL. FACTOR- 1.775333 UNITS/PP
 FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1 166.15	3.335	235.592	231.481	1.007	1.987835
2 686.54	3.327	73.299	70.436	1.021	2.677379
3 3022.49	3.386	38.375	37.143	1.042	11.335796
4 422.88	3.012	226.449	74.947	0.714	1.716331
5 2112.12	3.760	29.528	29.169	1.055	2.953125
6 1314.34	3.337	42.151	44.856	1.131	1.674574
7 2349.34	3.067	31.334	14.632	1.051	4.953243
8 434.23	3.312	94.697	106.777	1.015	1.339794
9 283.85	3.008	162.197	159.168	0.913	1.634350
10 693.08	3.023	68.231	69.911	1.022	1.729735
11 93.38	3.033	376.506	444.313	1.004	1.895559
12 1228.46	3.335	44.776	46.251	0.917	2.018687
13 2177.53	3.362	33.396	29.762	1.057	2.495763
14 243.37	3.337	185.644	169.537	1.009	1.271739
15 569.62	3.319	62.417	73.325	1.025	1.255529
16 837.69	3.024	59.223	55.147	1.024	1.908294
17 6261.15	3.178	20.358	19.507	1.081	9.996657
18 4747.12	3.135	18.264	19.251	1.082	6.846831
19 6295.58	3.179	13.338	13.343	1.118	6.717846
20 8836.92	3.251	13.339	11.764	1.119	12.082659
21 1793.65	3.351	33.494	33.477	1.047	3.130333
22 1889.23	3.354	30.667	31.513	0.953	3.042952
23 1698.46	3.348	35.377	37.711	0.944	2.576761
24 3635.77	3.183	34.697	33.374	0.947	1.823851
25 6257.88	3.178	14.990	15.759	1.103	6.729527
26 992.69	3.028	60.956	55.734	1.029	2.341633

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
2272.29	3.365	77.341	74.545	1.044	4.208497
SD 2297.52	3.365	84.350	91.261	1.132	1.464791
SE 453.58	3.313	15.542	17.732	1.076	2.579533

27 784.81	3.322	58.132	59.448	1.027	1.804468
28 738.27	3.321	68.581	57.728	1.024	2.133832
29 72.31	3.032	478.316	564.759	1.033	0.911638
30 879.81	3.025	68.182	65.514	1.024	1.204963
31 397.12	3.011	115.315	117.481	1.014	1.459249
32 831.73	3.323	81.399	61.115	1.023	2.628994
33 2343.19	3.058	33.345	33.662	1.049	1.502091
34 1476.46	1.149	35.337	36.422	1.042	1.319072
35 1579.81	3.148	17.597	29.672	1.042	2.453344
36 466.15	3.013	147.638	103.885	1.013	2.727733
37 225.38	3.006	232.630	155.215	1.008	1.851826
38 1984.23	3.331	50.241	48.176	0.934	2.114250
39 1102.50	3.031	46.781	47.192	0.933	1.883652
40 2361.35	1.067	26.634	24.491	1.056	2.706480
41 1647.88	3.047	40.697	29.379	1.049	2.209896
42 3389.81	3.096	24.690	24.137	1.066	0.153937
43 41.73	3.001	852.273	762.195	1.002	0.871875
44 1433.38	3.041	49.238	39.346	1.036	2.504838
45 1027.12	3.329	58.888	50.621	1.030	2.215579
46 1291.15	3.337	44.305	35.619	1.043	2.932162
47 1434.81	3.341	42.847	36.037	0.948	2.487786
48 1954.42	3.056	32.183	17.852	1.056	2.472614
49 2851.54	3.181	31.395	24.769	1.055	2.475718
50 737.69	1.023	67.543	73.172	1.122	1.554054
51 1293.65	3.337	40.857	44.537	0.938	2.231395
52 3134.23	3.089	18.532	20.177	1.085	2.510303

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1796.13	3.051	92.001	76.925	1.040	3.474321
SD 1872.38	3.151	138.125	135.476	1.027	2.774519
SE 249.97	3.007	19.154	19.787	1.004	1.385037

ORIGINAL PAGE IS
 OF POOR QUALITY

* DATE 12/16/78
 MOBIL TYCO SAMPLE # 26 JPL #5-685 (18-53-1) JPEC 1
 TWINS ONLY
 JTM OUT PUT DATA DIVIDED BY 100
 .01 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 32.54X100

MAG-800.3 UNITS-MM CAL. FACTOR- 1.139375 UNITS/PP
 FRAME AREA- 3.070313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	35.86	510.359	4.688	1.416	1.794	1.333112
2	22.96	326.490	5.238	2.338	1.587	1.333113
3	17.36	242.573	12.530	2.287	1.459	1.333116
4	57.68	823.378	2.634	1.638	1.727	1.333117
5	17.15	243.884	6.048	1.637	1.667	1.333118
6	37.39	527.542	3.724	1.982	1.117	1.333119
7	1.45	375.374	6.696	1.786	3.613	1.333124
8	77.99	1137.690	3.074	3.651	1.648	1.333115
9	46.16	556.477	7.212	1.234	1.867	1.333111
10	25.94	368.886	10.417	2.155	1.579	1.333118
11	32.48	461.982	6.250	1.293	1.832	1.333117
12	26.46	376.310	4.878	1.735	1.715	1.333119
13	19.76	281.935	8.523	1.723	1.653	1.333116
14	18.09	273.139	6.048	1.953	3.571	1.333116
15	9.86	12.238	187.500	37.500	1.227	1.333114
16	50.68	720.727	4.808	1.179	1.936	1.333114
17	9.96	141.610	17.045	3.124	1.384	1.333115
18	10.63	150.789	10.417	3.724	1.365	1.333114
19	20.99	298.518	12.500	2.373	1.459	1.333117
20	1.44	20.542	62.500	11.729	1.396	1.333113
21	5.04	71.679	37.500	6.466	1.168	1.333115
22	2.52	35.840	46.875	15.625	1.075	1.333114
23	21.39	304.200	11.029	1.720	1.605	1.333117
24	8.64	122.816	31.250	4.573	1.235	1.333117
25	1.17	16.609	62.500	14.423	1.077	1.333113
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	23.69	1336.943	22.841	4.905	1.634	1.333117
SE	19.08	270.220	37.860	7.763	1.424	1.333113
	3.80	54.044	7.574	1.553	1.085	1.333111
26	35.74	508.311	5.298	1.630	1.919	1.333111
27	42.17	598.784	4.261	1.084	1.011	1.333118
28	31.47	447.559	6.466	1.065	1.064	1.333117
29	5.37	72.116	4.076	1.125	1.213	1.333111
30	3.30	9.000	23.438	4.934	1.099	1.333110

DISREGARD FIELDS 26 THROUGH 30 ABOVE.

MAG-800.3 UNITS-MM CAL. FACTOR- 1.000375 UNITS/PP
 FRAME AREA- 3.070313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	36.94	525.357	4.688	1.217	1.917	1.333118
2	4.36	57.593	26.796	5.238	1.195	1.333113
3	5.35	76.150	20.833	5.208	1.211	1.333111
4	1.66	23.602	46.875	17.045	1.093	1.333112
5	3.26	46.329	46.875	8.523	1.133	1.333114
6	2.67	38.025	18.750	9.375	1.133	1.333113
7	1.26	17.926	93.750	46.875	1.029	1.333116
8	2.30	32.780	31.250	14.423	1.085	1.333115
9	66.75	949.114	4.808	1.293	1.869	1.333112
10	23.76	337.854	20.833	5.068	1.219	1.333117
11	22.16	315.127	7.813	1.974	1.557	1.333110
12	1.63	23.165	187.500	23.438	1.048	1.333114
13	0.00	0.000	55555555	55555555	1.000	55555555
14	0.31	4.371	55555555	93.750	1.011	1.333111
15	0.00	0.000	55555555	55555555	1.000	55555555
16	1.75	24.913	187.500	31.250	1.035	1.333118
17	0.33	0.373	55555555	55555555	1.000	55555555
18	0.43	6.119	55555555	93.750	1.016	1.333112
19	12.51	177.887	11.719	3.472	1.309	1.333116
20	19.45	276.665	5.515	1.786	1.653	1.333116
21	26.86	381.998	8.929	1.838	1.573	1.333119
22	21.88	311.193	6.944	2.107	1.523	1.333117
23	7.90	112.327	14.423	4.360	1.259	1.333117
24	23.72	337.417	9.868	2.155	1.504	1.333118
25	10.26	145.981	31.250	6.348	1.176	1.333119
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	11.87	148.883	55555555	55555555	1.242	55555555
SE	15.35	213.376	55555555	55555555	1.272	55555555
	3.07	43.675	55555555	55555555	1.154	55555555

THE SECOND 25 FIELDS ARE A CONTINUATION OF THE FIRST 25 FIELDS

DATE 12/19/78
 MODEL PVT SAMPLE # 25 JPL # 5-695 (19-63-1) SPEC 11
 DISLOCATION PITS ONLY
 .31 MICRONS SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA 7.1122

MAG-811.7 UNITS-MICRONS CAL. FACTOR- 3.375149 UNITS/0.0
 FRAME AREA- 3.515625333 34

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	449.15	3.313	128.955	97.962	3.315	2.685748
2	1117.75	3.332	17.661	48.126	3.334	3.282353
3	436.36	3.312	117.629	98.798	3.314	3.333517
4	5.35	3.333	5859.375	6257.317	3.337	3.893625
5	874.93	3.325	58.677	55.572	3.329	3.817944
6	3.33	3.333	555555555	555555555	3.333	555555555555
7	393.94	3.339	254.145	138.683	3.341	1.746528
8	619.72	3.318	95.453	84.383	3.319	4.326923
9	219.448	3.376	196.954	187.126	3.379	1.856727
10	884.56	3.325	68.934	66.395	3.325	3.854384
11	146.45	3.334	276.549	255.457	3.336	3.488742
12	1976.34	3.356	34.581	35.714	3.347	3.419544
13	1129.33	3.332	41.184	35.218	3.345	2.155891
14	2159.31	3.361	28.153	29.343	3.358	0.251757
15	2675.92	3.376	23.763	19.131	3.382	1.456319
16	1385.63	3.331	54.953	53.841	3.331	3.674354
17	5517.81	3.343	37.787	33.614	3.345	3.348761
18	1183.28	3.334	57.174	49.368	3.335	3.694151
19	948.87	3.327	73.783	63.346	3.325	8.397356
20	1918.73	3.355	33.239	33.322	3.349	4.899576
21	2377.32	3.368	23.971	24.376	3.368	3.843792
22	298.43	3.338	135.281	146.714	3.312	1.983758
23	1331.35	3.329	56.212	48.879	3.329	4.327468
24	716.28	3.328	81.399	68.292	3.323	2.942788
25	2449.72	3.378	31.833	19.679	3.373	6.928869
26	2885.35	3.382	29.364	22.812	3.375	5.062994
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	1129.72	3.332	555555555	555555555	3.333	555555555555
	846.73	3.024	555555555	555555555	1.123	555555555555
SE	165.98	3.095	555555555	555555555	3.005	555555555555

27	2263.85	3.364	31.513	26.297	3.358	4.635139
28	489.31	3.314	91.285	74.287	3.329	1.835526
29	716.62	3.329	85.158	55.441	3.325	4.112369
30	269.58	3.338	171.877	121.595	3.313	2.998629
31	4427.32	3.126	17.135	17.857	3.391	4.587789
32	3441.83	3.398	23.577	19.318	3.385	6.134523
33	3892.11	3.111	15.836	15.121	3.134	5.935823
34	4349.86	3.124	15.445	13.307	3.115	5.431819
35	4189.13	3.119	15.615	14.196	3.113	4.955698
36	918.87	3.326	47.637	49.264	3.333	2.299342
37	566.21	3.316	99.405	87.699	3.319	2.726223
38	4123.38	3.117	15.925	14.103	3.113	5.146172
39	2912.96	3.357	35.471	34.153	3.349	7.389917
40	3251.97	3.393	18.289	19.366	3.386	5.297359
41	6768.33	3.193	18.831	12.532	3.139	9.893702
42	3717.46	3.136	16.569	18.179	3.093	5.340513
43	2300.73	3.365	21.742	23.344	3.374	3.975531
44	5875.49	3.167	11.271	11.628	3.143	4.774333
45	1434.08	3.346	38.899	32.194	3.351	2.392595
46	1236.93	3.335	44.835	42.003	3.338	3.518429
47	976.34	3.328	49.929	44.138	3.334	3.383405
48	885.27	3.323	68.934	57.692	3.326	3.813274
49	1187.61	3.334	38.297	38.363	3.343	2.293996
50	2145.92	3.381	26.793	26.121	3.361	4.337171
AVERAGE						
NO.	NO./AREA	MFPV	MFPH	L/A	AFETA	
1818.59	3.352	555555555	555555555	3.359	555555555555	
SD 1545.95	3.344	555555555	555555555	1.076	555555555555	
SE 216.63	3.096	555555555	555555555	3.005	555555555555	

DATE 12/16/78
 MOBIL TYCO SAMPLE #27 IOL 5-685 (12-53-1) SPEC M
 TWIN ONLY
 TWY OUTPUT DATA DIVIDED BY 100
 .01 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 26.27X100

MAG-800-J UNITS-MM CAL. FACTOR- 3.000375 UNITS/PP
 FRAME AREA- 3.373313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	6.36	90.412	37.590	9.868	1.199	1.000000
2	0.91	12.993	187.500	31.250	3.035	1.000000
3	3.08	43.852	46.875	15.625	1.077	1.000000
4	0.99	14.076	55555555	37.500	0.029	1.000000
5	0.03	1.000	55555555	55555555	0.000	55555555
6	8.07	114.774	9.375	4.800	3.245	1.000000
7	48.92	695.682	1.000	1.059	7.816	1.000000
8	1.18	16.783	93.750	37.500	7.032	1.000000
9	9.71	138.854	8.929	5.068	7.216	1.000000
10	5.56	79.042	23.338	13.393	1.119	0.000000
11	0.69	9.745	55555555	16.875	1.021	1.000000
12	1.87	26.528	93.750	17.045	1.057	0.000000
13	1.98	28.152	93.750	11.719	1.093	0.000000
14	6.24	88.787	12.000	5.208	3.232	0.000000
15	0.95	13.335	187.500	31.250	0.035	0.000000
16	0.00	0.000	55555555	55555555	0.000	55555555
17	17.36	346.872	7.212	5.357	7.269	0.000000
18	3.16	44.935	23.438	14.423	0.093	0.000000
19	8.64	122.895	11.719	4.688	7.283	0.000000
20	0.00	0.000	55555555	55555555	0.000	55555555
21	4.87	69.297	20.833	7.813	0.152	0.000000
22	2.25	32.942	46.875	20.833	1.059	0.000000
23	0.38	5.414	55555555	55555555	0.000	55555555
24	4.57	64.966	13.393	6.696	0.187	0.000000
25	18.08	257.159	7.212	2.534	3.443	0.000000

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
6.23	88.636	55555555	55555555	1.144	55555555
9.95	141.523	55555555	55555555	1.176	55555555
1.99	28.315	55555555	55555555	3.315	55555555

26	12.60	179.199	14.423	4.076	1.275	1.000000
27	22.76	323.749	4.800	2.206	7.512	1.000000
28	35.67	507.279	8.152	1.659	0.653	1.000000
29	9.21	131.316	11.029	4.360	1.253	1.000000
30	22.57	321.042	6.250	1.995	1.573	1.000000
31	6.32	89.873	18.750	4.934	1.211	1.000000
32	5.22	74.173	9.375	6.944	1.192	1.000000
33	13.93	153.378	7.500	3.476	7.112	1.000000
34	22.19	315.528	7.500	1.838	1.595	1.000000
35	37.38	531.642	1.000	0.431	1.827	1.000000
36	25.20	358.398	8.152	2.287	0.485	1.000000
37	15.34	218.179	9.868	3.472	1.336	0.000000
38	19.34	275.024	12.500	2.930	3.373	0.000000
39	16.10	229.006	8.583	2.799	7.419	1.000000
40	17.24	245.248	14.423	2.107	0.488	1.000000
41	33.35	474.256	9.375	1.276	1.824	1.000000
42	33.58	476.420	8.152	1.179	1.925	1.000000
43	11.91	169.454	9.868	4.808	3.229	1.000000
44	3.57	8.121	55555555	37.500	0.029	1.000000
45	42.79	608.518	6.148	1.293	1.829	1.000000
46	16.79	238.751	6.250	2.763	0.539	1.000000
47	12.75	181.364	9.868	3.125	7.368	1.000000
48	7.23	102.863	31.250	5.357	7.179	1.000000
49	15.07	214.789	11.719	2.799	7.387	1.000000
50	35.44	504.031	4.464	1.165	3.939	1.000000

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
12.87	182.978	55555555	55555555	1.307	55555555
12.47	177.786	55555555	55555555	1.269	55555555
1.76	25.786	55555555	55555555	1.338	55555555

DATE 12/18/78
 MODEL TPOD SAMPLE # 27 JOL # 1-685 (18-43-1) SPEC
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA =
 AVERAGE DISLOCATION PIT AREA = 7.35 μ^2

MAG-833.1 UNITS-MICRONS CAL. FACTOR- 1.375113 UNITS/ μ^2
 FRAME AREA- 3.515625439 μ^2

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	4482.13	3.127	17.553	17.938	0.195	7.977755
2	1383.83	3.339	41.155	42.344	1.319	4.314249
3	2886.95	3.382	23.644	25.256	1.366	5.829277
4	3360.03	3.387	34.994	43.163	1.342	19.179894
5	2932.24	3.083	22.147	17.813	1.085	4.861234
6	2048.23	3.058	49.446	49.735	3.032	15.864258
7	1864.11	3.054	28.111	24.156	1.065	3.108923
8	439.43	3.312	115.741	199.412	1.215	2.269943
9	2518.87	3.072	28.528	23.695	1.074	1.699587
10	201.99	3.096	262.695	143.130	3.010	2.843967
11	1301.70	3.037	53.510	35.865	1.741	4.324298
12	579.31	3.016	85.460	46.758	1.126	1.793848
13	798.58	3.023	89.231	41.209	0.331	1.598722
14	480.33	3.014	183.363	86.725	1.017	2.355817
15	954.68	3.327	63.212	57.339	1.327	1.595453
16	1489.53	3.042	39.095	37.114	1.340	1.619373
17	2297.45	3.046	33.699	38.458	1.355	6.380121
18	1044.96	3.338	46.228	38.291	1.045	2.122319
19	1316.68	3.037	54.476	28.319	0.848	4.170228
20	1238.65	3.034	34.774	39.743	1.049	2.055344
21	1394.33	3.043	64.879	41.741	1.034	1.679688
22	3970.23	3.113	19.478	18.339	1.327	3.231881
23	4485.11	3.128	19.446	18.871	1.085	1.653292
24	1515.46	3.345	29.674	39.877	1.042	1.856597
25	6782.84	3.193	12.603	13.768	1.125	1.1396612
26	1676.31	3.948	43.403	43.564	1.338	6.178799
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2946.35	3.958	54.593	41.954	1.351	5.738619
SD	1499.96	3.043	49.264	39.338	1.027	4.160537
SE	294.17	3.338	9.662	5.695	1.115	1.915948
27	4352.48	3.124	18.374	17.635	1.091	7.338568
28	1975.74	3.056	26.013	24.169	1.064	3.634074
29	2217.16	3.063	24.452	22.195	1.067	3.413217
30	2898.58	3.382	21.239	19.323	1.383	4.989114
31	2827.83	3.183	18.336	18.882	1.195	1.374855
32	5761.38	3.164	15.711	14.194	1.115	17.447173
33	1911.56	3.154	11.612	11.877	1.151	3.374872
34	3361.42	3.096	21.787	23.392	1.779	6.347679
35	789.72	3.022	54.474	52.986	1.031	1.833724
36	769.22	3.022	61.637	59.637	1.028	2.339293
37	246.93	3.007	284.684	171.389	1.008	1.577138
38	1123.99	3.032	61.516	47.182	1.031	4.358272
39	1868.37	3.030	41.234	67.188	1.023	5.164768
40	12118.01	3.345	8.384	9.753	0.187	16.616701
41	7808.79	3.222	18.515	18.264	1.158	18.518597
42	4739.01	3.135	18.390	15.097	1.100	9.870339
43	4466.81	3.187	21.737	19.712	1.082	15.588322
44	1639.57	3.046	27.811	37.897	1.151	1.947295
45	6688.23	3.197	12.555	13.468	1.121	12.188879
46	12535.68	3.367	11.641	12.445	1.132	34.273197
47	2879.43	3.382	17.874	19.548	1.087	3.712237
48	3956.45	3.117	14.110	12.424	1.118	6.493073
49	3384.54	3.096	17.820	16.729	0.895	4.052480
50	3855.46	3.087	22.771	21.904	1.072	6.746555
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
	2914.59	3.383	44.514	36.780	1.065	7.163867
SD	2599.93	3.074	45.906	31.507	1.038	9.009122
SE	367.69	3.310	6.492	4.456	1.095	1.132661

DATE 12/19/78
 MOBIL TYCO SAMPLE # 28 JPL 3 4-685 (18-63-1) SPEC V
 TWINS ONLY
 ITEM OUTPUT DATA DIVIDED BY 133
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE PLAIN AREA = 33.14X133

MAG-833.3 UNITS-MM CAL. FACTOR- 1.030375 UNITS/PP
 FRAME AREA- 3.070313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	86.39	1228.673	5.368	1.957	1.141	1.000018
2	35.58	535.975	5.468	1.875	1.016	1.000015
3	41.01	583.223	3.289	1.225	1.541	1.000011
4	55.94	795.655	6.250	1.735	1.656	1.000016
5	116.84	1661.691	5.515	1.913	1.635	1.000039
6	46.02	654.463	6.250	1.630	1.677	1.000013
7	16.17	203.027	6.944	2.799	1.427	1.000008
8	36.72	522.283	5.208	1.258	1.859	1.000008
9	8.06	114.585	15.625	5.968	1.219	1.000005
10	43.33	613.976	6.944	1.131	1.549	1.000000
11	25.38	363.923	3.936	1.856	1.669	1.000013
12	53.32	758.318	4.934	1.399	1.838	1.000018
13	83.34	1181.037	5.357	1.109	1.981	1.000018
14	18.53	263.502	6.466	2.799	1.429	1.000014
15	20.04	284.959	6.466	2.467	1.464	1.000017
16	16.51	334.748	5.515	2.180	1.544	1.000010
17	1.84	26.173	23.438	17.345	1.101	1.000004
18	5.46	37.673	12.423	6.696	1.181	1.000006
19	14.51	223.424	13.825	3.409	1.320	1.000008
20	6.82	76.989	31.250	6.048	1.131	1.000008
21	0.22	0.300	55555555	55555555	1.000	5555555555
22	13.42	190.545	6.250	3.178	1.403	1.000012
23	1.12	101.281	41.323	1.013	1.192	1.000008
24	16.17	230.327	4.876	1.995	1.645	1.000007
25	1.63	108.147	12.500	6.048	2.216	1.000009
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	31.02	441.172	55555555	55555555	1.513	5555555555
SE	29.70	412.394	55555555	55555555	1.290	5555555555
	5.89	82.479	55555555	55555555	1.358	5555555555
26	23.96	343.750	3.989	2.183	1.633	1.000019
27	27.52	391.393	5.068	2.568	1.480	1.000016
28	0.00	0.000	55555555	55555555	1.000	5555555555
29	6.19	87.977	12.500	5.397	1.211	1.000014
30	2.23	31.758	62.533	26.786	1.348	1.000013
31	7.33	0.333	55555555	55555555	1.333	5555555555
32	3.33	3.330	55555555	55555555	1.333	5555555555
33	32.32	455.334	11.029	5.515	1.224	1.000010
34	1.24	17.595	46.875	37.500	1.348	1.000011
35	15.81	224.878	26.786	6.944	1.457	1.000018
36	35.67	507.242	3.606	1.375	1.651	1.000021
37	4.10	59.225	20.833	9.375	1.133	1.000005
38	2.56	36.478	93.750	31.250	1.000	1.000012
39	1.37	7.373	55555555	55555555	1.107	5555555555
40	0.23	0.000	55555555	55555555	1.000	5555555555
41	1.57	22.316	62.500	12.500	1.085	1.000010
42	0.00	0.000	55555555	55555555	1.000	5555555555
43	0.33	4.721	93.750	187.500	1.000	1.000002
44	0.00	0.000	55555555	55555555	1.000	5555555555
45	2.32	33.745	37.500	15.625	1.397	1.000015
46	2.05	29.183	37.500	14.423	1.383	1.000015
47	2.35	29.183	187.500	62.533	1.021	1.000015
48	2.23	31.758	62.533	15.625	1.372	1.000015
49	4.16	59.223	15.625	11.719	1.117	1.000004
50	1.45	20.599	93.750	17.500	1.035	1.000017
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
SD	18.86	268.240	55555555	55555555	1.319	5555555555
SE	25.01	355.713	55555555	55555555	1.311	5555555555
	3.54	53.335	55555555	55555555	1.144	5555555555

DATE 12/19/78

MOBIL TYCO SAMPLE # 28 JPL # 5-685 (18-63-1) SPEC V

DISLOCATION PITS ONLY

.31 MM STEP SIZE

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY

AVERAGE DISLOCATION PIT DIA = 0.0000

MAG-200.1 UNITS-MICRONS CAL. FACTOR-

1.375001 UNITS/PP

FRAME AREA- 3.515625000 34

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	MFETA	
1	18.75	0.001	2083.333	2038.043	1.001	1.068750
2	2405.43	0.068	26.180	25.862	1.062	1.638141
3	353.29	0.319	126.861	122.070	1.014	1.373211
4	81.58	0.002	564.759	532.677	1.003	1.516394
5	82.07	0.002	768.443	183.164	1.002	1.923828
6	31.58	0.001	946.970	756.348	1.032	1.792118
7	1888.49	0.054	42.363	40.628	1.038	6.870136
8	611.02	0.017	113.913	81.380	1.017	4.146205
9	3175.99	0.090	21.249	20.677	1.077	4.095730
10	1404.44	0.040	47.301	36.002	1.043	3.219295
11	4432.57	0.126	14.479	14.660	1.112	4.036742
12	911.51	0.026	51.963	57.304	0.028	2.458498
13	73.36	0.002	564.759	529.661	0.003	1.140341
14	3639.83	0.104	19.564	18.978	0.082	4.832347
15	931.74	0.027	56.647	57.269	0.029	2.950521
16	1452.96	0.041	49.841	46.480	0.036	3.152998
17	11973.85	0.341	8.176	9.244	0.182	13.365866
18	3789.54	0.162	15.326	15.500	0.193	8.344712
19	410.91	0.012	49.313	86.947	0.013	3.256108
20	4475.15	0.127	28.344	24.684	0.167	15.880122
21	9733.70	0.217	8.467	9.822	0.171	10.455186
22	1409.28	0.040	47.880	46.503	0.035	4.127729
23	1984.44	0.054	32.700	27.164	0.054	3.486717
24	2375.45	0.058	26.824	27.119	0.061	1.407797
25	4714.31	0.134	14.436	14.226	0.134	4.348149

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	MFETA
2568.43	0.373	235.432	192.952	1.354	0.562314
SD 2953.82	0.084	454.651	421.428	1.350	1.655376
SE 599.76	0.117	93.933	84.186	0.013	1.731951

26	1102.33	0.031	44.749	34.228	1.347	1.613717
27	1013.32	0.029	62.905	57.835	1.025	3.814699
28	7716.78	0.219	13.227	13.559	1.119	11.763862
29	2546.22	0.072	24.275	25.531	1.364	3.853125
30	4541.61	0.129	16.217	17.092	1.096	4.163614
31	7685.69	0.219	11.608	11.114	1.143	8.820491
32	5523.33	0.157	15.884	14.472	1.138	4.833846
33	3354.11	0.097	37.210	19.973	1.393	1.636758
34	7295.37	0.238	12.926	12.266	1.126	13.678248
35	2024.67	0.058	25.363	26.641	0.063	2.433731
36	1891.18	0.052	44.159	45.094	0.034	6.479341
37	1967.93	0.056	37.525	25.587	0.060	2.470746
38	5436.88	0.155	13.250	14.043	0.114	6.474038
39	8906.25	0.253	10.892	10.956	1.149	10.893911
40	4051.64	0.115	14.490	15.836	1.138	3.457242
41	3448.36	0.098	21.148	19.330	0.080	3.952293
42	6195.23	0.176	14.759	15.376	1.134	9.180107
43	7350.49	0.209	10.429	10.742	0.157	5.714393
44	4994.74	0.142	14.001	14.671	1.114	4.977273
45	5076.15	0.144	14.239	14.862	1.111	4.511548
46	3635.53	0.133	22.231	20.983	1.174	5.571549
47	3021.38	0.086	23.473	23.432	1.169	4.311583
48	5851.32	0.166	17.963	17.189	1.094	8.625647
49	3815.95	0.109	19.184	18.818	0.086	4.237196
50	4568.26	0.138	23.402	22.348	0.072	8.937893

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	MFETA
3536.89	0.101	128.490	106.908	1.173	5.377612
SD 2764.65	0.079	338.915	310.262	1.247	3.429472
SE 390.98	0.111	47.930	43.978	1.007	1.485001

DATE 12/21/76

MOBILE TYPED SAMPLE # 19 PL 13-508 (12-43-1) 1976

PRINT ONLY

ITEM OUTPUT DATA OBTAINED BY 197

1.0000000000000000

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE

AVERAGE FWIN AREA = 29.212117

MAG-811.0 INITS-MM CAL. FACTOR = 1.333375 INITS/22
FRAME AREA = 3.473313

1.333375 INITS/22

FIELD	NO.	NO./AREA	MFPV	MFRH	L/A	AREA
1	4.33	61.545	37.533	13.417	1.139	1.333336
2	1.85	25.249	187.533	18.753	1.159	1.333334
3	8.86	125.953	18.753	6.348	1.195	1.333337
4	7.41	115.438	11.429	7.112	1.179	1.333338
5	7.31	99.713	17.345	6.348	1.211	1.333336
6	3.97	13.833	187.533	31.253	1.135	1.333334
7	11.87	154.579	17.417	6.838	1.267	1.333337
8	13.12	185.544	8.523	3.178	1.305	1.333335
9	24.32	341.531	5.944	2.474	1.475	1.333339
10	2.58	38.168	37.533	11.417	1.139	1.333336
11	3.33	3.333	33333333	33333333	1.133	1.3333333333
12	3.33	3.333	33333333	33333333	1.133	1.3333333333
13	4.33	57.251	27.833	13.417	1.103	1.333336
14	9.43	134.364	13.393	4.464	1.261	1.333338
15	1.71	24.332	93.753	27.833	1.153	1.333334
16	11.91	169.369	8.929	2.534	1.445	1.333335
17	4.39	62.537	15.625	7.593	1.145	1.333339
18	12.34	171.277	6.466	3.124	1.381	1.333336
19	16.17	229.263	6.466	2.933	1.413	1.333338
20	16.47	234.254	9.868	3.233	1.371	1.333332
21	15.97	227.398	6.257	1.893	1.638	1.333335
22	19.72	283.532	6.348	1.349	1.776	1.333336
23	16.67	237.117	6.313	1.259	1.616	1.333339
24	9.19	131.724	8.523	4.624	1.281	1.333337
25	3.33	3.333	33333333	33333333	1.133	1.3333333333
26	2.11	31.157	31.253	15.625	1.381	1.333334

AVERAGE

	NO.	NO./AREA	MFPV	MFRH	L/A	AREA
SD	8.53	124.852	33333333	33333333	1.253	3333333333
SE	6.68	95.313	33333333	33333333	1.213	3333333333
	1.31	18.634	33333333	33333333	1.141	3333333333

27	19.75	256.595	5.157	2.137	1.567	1.333331
28	1.74	11.095	46.875	26.786	1.345	1.333332
29	7.31	99.713	13.753	6.494	1.173	1.333334
30	3.33	3.333	33333333	33333333	1.133	3333333333
31	2.11	31.157	46.875	3.438	1.154	1.333339
32	14.99	213.262	8.929	1.753	1.563	1.333334
33	15.63	223.327	14.753	3.127	1.285	1.333339
34	9.43	134.364	9.375	4.838	1.267	1.333338
35	15.53	221.895	13.393	4.361	1.254	1.333331
36	21.93	297.231	3.989	2.747	1.621	1.333333
37	5.33	71.564	17.345	9.375	1.139	1.333337
38	19.79	281.486	6.466	2.568	1.467	1.333334
39	28.95	411.734	6.944	1.347	1.979	1.333334
40	42.57	635.434	4.464	1.321	3.845	1.333331
41	21.54	316.295	2.717	1.553	1.819	1.333337
42	49.58	715.147	5.15	1.337	1.333	1.333333
43	34.25	487.115	6.694	2.131	1.557	1.333332
44	18.38	241.440	6.96	1.976	1.379	1.333331
45	42.7	639.728	4.688	1.145	3.949	1.333333
46	47.33	558.822	3.889	1.421	1.627	1.333336
47	26.37	374.997	7.813	1.183	1.531	1.333331
48	23.55	334.921	6.494	1.729	1.841	1.333335
49	35.33	12.431	6.859	1.399	4.771	1.333337
50	51.55	712.412	5.218	1.165	4.893	1.333331
51	16.57	221.772	6.622	1.16	1.523	1.333332

LAST FIELD DELETED

AVERAGE

	NO.	NO./AREA	MFPV	MFRH	L/A	AREA
SD	15.45	219.749	33333333	33333333	1.381	3333333333
	13.71	166.162	33333333	33333333	1.363	3333333333

ORIGINAL PAGE IS
OF POOR QUALITY

DATE 12/21/78
 MOBIL TYPED SAMPLE # 29 JPL 1-485 (10-43-1) 1210
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA=5.72

MAG-800.0 INITS-MICRONS CAL. FACTOR-
 FRAME AREA- 3.515625000 14

1.375111 INITS/IN

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	837.34	3.123	82.818	87.749	1.319	3.472741
2	395.63	3.111	127.531	107.265	1.315	1.433488
3	1362.94	3.131	57.131	53.176	1.310	1.455281
4	1531.42	3.144	46.758	51.174	1.314	1.642174
5	3625.87	3.113	22.777	19.312	1.319	5.183395
6	483.42	3.114	97.962	84.383	1.320	1.373346
7	4564.16	3.130	15.593	15.639	1.309	1.396763
8	4231.47	3.123	13.564	15.913	1.387	5.117642
9	1557.69	3.144	41.519	37.757	1.341	2.632287
10	1219.19	3.134	43.364	41.531	1.310	1.791791
11	1695.28	3.140	33.359	31.174	1.355	1.845445
12	3738.29	3.136	17.867	13.146	1.392	3.243783
13	2447.73	3.171	16.581	27.193	1.361	1.175633
14	543.73	3.115	98.165	84.612	1.318	1.753843
15	877.62	3.125	55.638	51.681	1.331	1.535197
16	1396.53	3.141	35.868	38.418	1.310	1.168557
17	656.12	3.119	74.316	69.132	1.322	1.634151
18	2855.77	3.181	28.478	21.197	1.464	4.785645
19	3845.98	3.129	19.994	16.756	1.393	1.694473
20	1838.29	3.152	35.311	24.187	1.365	2.723153
21	1236.54	3.135	45.875	29.891	1.347	1.949585
22	939.34	3.127	66.631	65.314	1.329	1.313226
23	3452.81	3.198	21.186	18.066	1.382	1.947634
24	2962.94	3.184	23.321	21.753	1.372	1.339513
25	3712.94	3.136	23.483	19.125	1.381	1.778557

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	2066.48	3.159	46.151	41.291	1.353	3.758819
SD	1311.99	3.137	28.412	15.983	1.327	1.313310
SE	262.41	3.117	5.682	1.106	1.311	1.240662

26	5417.83	3.154	14.458	13.621	1.117	1.060236
27	4215.21	3.123	18.783	16.564	1.394	5.323125
28	1165.73	3.187	21.182	18.627	1.384	2.662461
29	8477.83	3.241	14.166	11.757	1.337	12.476933
30	2712.59	3.177	29.696	23.284	1.343	1.378188
31	8952.27	3.255	11.773	13.447	1.310	7.416757
32	1755.59	3.151	41.373	38.191	1.311	1.931924
33	1154.37	3.133	79.315	25.564	1.343	1.281184
34	3677.45	3.135	21.319	19.251	1.394	1.411845
35	3982.34	3.113	16.718	15.493	1.311	1.105013
36	1598.78	3.145	14.128	12.184	1.310	1.922205
37	5225.17	3.149	15.259	15.266	1.137	1.649104
38	5318.36	3.151	13.191	13.489	1.122	1.964739
39	3258.34	3.193	31.513	21.054	1.365	1.128547
40	450.71	3.113	217.314	44.899	1.317	8.242226
41	2172.13	3.159	45.422	39.174	1.354	2.391716
42	5541.43	3.158	17.131	13.615	1.118	7.319517
43	515.56	3.115	116.753	111.242	1.315	1.182448
44	513.29	3.115	111.915	109.283	1.311	1.155522
45	1951.55	3.155	16.654	12.826	1.345	1.507633
46	855.77	3.124	88.194	41.482	1.332	2.322465
47	3274.65	3.193	37.381	24.162	1.356	1.362354
48	715.21	3.121	75.422	35.892	1.320	1.318526
49	1531.54	3.144	123.654	22.938	1.311	11.514165
50	2441.33	3.159	42.78	45.386	1.353	1.662773

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	2616.93	3.174	48.649	36.553	1.351	1.180714
SD	1941.55	3.155	19.142	28.418	1.333	1.531168
SE	274.44	3.138	5.536	4.317	1.315	1.354143

DATE 12/21/78
 MOBIL TYCO SAMPLE # 31 INL # 5-485 (12-43-1) 250
 TWIN ONLY
 TFM OUTPUT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 34.79X111

ORIGINAL PAGE IS
 OF POOR QUALITY

MAG=800.1 UNITS-MM CAL. FACTOR= 1.17375 UNITS/PP
 FRAME AREA= 1.17313

FIELD NO.	NO./AREA	MFPV	MPH	L/A	AREA
1	69.65	991.527	6.348	1.359	1.311116
2	51.66	763.233	8.123	1.674	1.311118
3	54.17	768.957	5.859	1.563	1.311119
4	36.59	527.435	6.253	1.553	1.311119
5	17.56	249.778	8.929	1.373	1.311117
6	47.23	671.662	7.533	1.389	1.311112
7	25.34	356.167	4.573	1.786	1.311114
8	33.61	435.374	5.523	2.315	1.311112
9	53.55	761.598	6.464	1.465	1.311114
10	75.12	1166.973	5.768	1.119	1.311115
11	53.66	763.233	4.638	1.150	1.311113
12	73.30	1142.445	5.238	1.442	1.311126
13	21.44	334.966	8.929	2.287	1.311119
14	27.61	293.111	5.515	2.533	1.311113
15	12.76	181.518	11.329	5.218	1.311112
16	13.31	189.275	7.533	1.172	1.311117
17	23.36	285.344	11.719	2.841	1.311117
18	13.29	146.351	17.345	6.357	1.311118
19	2.33	33.113	46.875	14.423	1.311116
20	10.52	149.622	23.438	4.261	1.311117
21	1.95	27.799	37.133	23.438	1.311117
22	11.84	158.426	14.423	5.859	1.311112
23	5.46	77.672	26.786	12.519	1.311119
24	3.89	12.673	46.875	11.253	1.311112
25	1.26	17.987	62.533	26.786	1.311113
26	8.85	125.911	8.152	1.934	1.311117
27	5.46	77.672	18.753	7.813	1.311115

AVERAGE

	NO.	NO./AREA	MFPV	MPH	L/A	AREA
SD	27.31	382.211	15.728	6.361	1.458	1.311111
SE	23.46	333.654	15.111	5.132	1.317	1.311115
	4.51	64.212	2.908	1.559	1.163	1.311111

28	14.33	199.495	8.123	4.464	3.288	1.311114
29	19.66	279.631	4.464	1.634	1.493	1.311114
30	3.97	56.416	21.833	11.417	1.123	1.311115
31	7.53	117.136	23.138	9.375	1.131	1.311112
32	3.74	53.144	11.253	12.519	1.193	1.311118
33	11.68	163.747	9.375	5.168	1.227	1.311117
34	12.16	172.923	6.466	3.753	1.384	1.311123
35	2.76	39.245	23.833	17.345	1.181	1.311117
36	9.31	132.452	13.393	5.719	1.195	1.311119
37	12.37	171.597	8.123	2.64	1.288	1.311115
38	8.88	126.321	7.212	1.357	1.253	1.311111
39	1.49	21.258	46.875	26.786	1.148	1.311117
40	3.94	56.336	18.753	7.533	1.163	1.311114
41	1.11	1.133	555555555	555555555	2.133	555555555
42	9.28	132.343	11.719	5.859	1.208	1.311119
43	7.47	116.289	18.753	6.212	1.152	1.311119
44	9.38	129.181	13.393	5.515	1.218	1.311117
45	9.69	137.765	11.719	4.934	1.229	1.311117
46	2.16	37.563	37.533	23.833	1.392	1.311114
47	2.44	34.748	187.533	31.253	1.135	1.311112
48	3.13	44.559	18.753	11.129	1.117	1.311115
49	2.24	31.897	26.786	15.625	1.183	1.311112
50	3.14	1.143	555555555	555555555	1.143	555555555

AVERAGE

	NO.	NO./AREA	MFPV	MPH	L/A	AREA
SD	17.87	254.185	555555555	555555555	1.125	555555555
SE	23.32	288.948	555555555	555555555	1.201	555555555
	2.87	43.863	555555555	555555555	1.743	555555555

DATE 12/21/78

MODEL TYPE SAMPLE #31 POL #5-405 (10-61-1) 1227

DISLOCATION PITS

.31 MM STEP SIZE

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE

AVERAGE TO DISLOCATION PIT AREA 1.122

MAG-810.1 INCH-MICRONS CAL. FACTOR-

175.111 MIC/INCH

FRAME AREA- 3.51544111 10

FIELD NO.	NO./AREA	AREA	AREA	L/A	AREA
1	1.11	1.111	888888888	1.111	888888888
2	28.34	1.111	1616.379	1.111	1.763103
3	431.55	1.112	195.721	1.115	1.694191
4	216.79	1.116	363.372	1.116	1.177584
5	229.89	1.117	452.899	1.117	1.633594
6	98.71	1.113	412.161	1.115	1.233359
7	747.35	1.121	71.949	1.125	1.979177
8	1911.85	1.154	45.246	1.163	1.611321
9	849.82	1.124	79.655	1.121	1.222481
10	89.48	1.113	382.653	1.114	1.794819
11	136.35	1.114	134.328	1.114	1.898408
12	11.15	1.111	3615.769	1.111	1.859375
13	1895.32	1.154	16.281	1.169	1.665831
14	1941.96	1.155	38.933	1.169	1.717113
15	2539.67	1.172	24.211	1.169	1.741789
16	2199.45	1.163	24.459	1.165	1.433378
17	225.65	1.115	237.444	1.117	1.617331
18	1541.48	1.143	19.111	1.142	1.141193
19	5334.13	1.152	16.196	1.111	1.179111
20	2594.46	1.174	28.722	1.159	1.743913
21	3517.21	1.111	21.752	1.176	1.277125
22	8673.43	1.247	17.333	1.131	1.594334
23	2687.64	1.176	26.656	1.162	1.581266
24	9353.14	1.258	13.433	1.154	1.646852
25	4189.85	1.119	19.934	1.178	1.358197

AVERAGE

NO.	NO./AREA	AREA	AREA	L/A	AREA
2143.27	1.156	888888888	888888888	1.142	888888888
30 2459.56	1.173	888888888	888888888	1.119	888888888
SE 491.93	1.114	888888888	888888888	1.108	888888888

26	3231.18	1.192	27.293	1.158	1.879234
27	14314.21	1.417	17.222	1.172	1.888819
28	959.78	1.127	76.718	1.124	1.676136
29	4121.33	1.117	17.155	1.103	1.577717
30	1564.94	1.113	38.444	1.179	1.615413
31	2522.14	1.172	27.852	1.159	1.193193
32	1673.25	1.148	39.641	1.142	1.718159
33	2426.75	1.169	13.156	1.134	1.132854
34	1523.56	1.143	34.179	1.146	1.822376
35	717.31	1.121	113.168	1.111	1.725962
36	3293.14	1.194	27.751	1.161	1.822356
37	1364.58	1.139	47.613	1.134	1.135961
38	4694.65	1.134	16.351	1.197	1.139458
39	2912.55	1.083	24.231	1.164	1.768941
40	4944.83	1.141	19.146	1.185	1.718145
41	4358.67	1.124	17.448	1.194	1.922226
42	2498.15	1.171	23.397	1.169	1.575345
43	1159.34	1.133	16.647	1.131	1.719835
44	3187.64	1.191	11.118	1.171	1.719281
45	1799.38	1.115	11.137	1.174	1.119160
46	5887.45	1.167	19.289	1.167	1.677595
47	6632.95	1.189	18.165	1.189	1.133766
48	6583.17	1.157	11.563	1.142	1.112233
49	6116.79	1.174	16.978	1.113	1.716367
50	4161.55	1.116	13.171	1.177	1.171373

AVERAGE

NO.	NO./AREA	AREA	AREA	L/A	AREA
2951.6	1.184	888888888	888888888	1.156	888888888
30 2763.73	1.178	888888888	888888888	1.141	888888888
32 389.43	1.111	888888888	888888888	1.116	888888888

DATE 12/24/78
 MODEL TUCO SAMPLE # 11 JPL # 145-76 -744 1250
 TWINS ONLY
 QTM JIPIT DATA DIVIDED BY 173
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 31.51X113

MAG-833.4 INITS-4M CAL. FACTOR- 1.1375 INITS/23
 FRAME AREA- 1.071413

FIELD NO.	NO./AREA	MEPH	MEPH	L/A	AREA
1	106.47	1317.137	1.319	1.974	1.111130
2	46.35	559.100	1.989	1.664	1.111116
3	61.52	875.115	2.171	1.915	1.111117
4	43.52	619.735	3.989	1.258	1.111113
5	61.78	868.684	4.167	1.334	1.111114
6	66.19	941.921	5.357	1.974	1.111113
7	48.48	689.439	4.167	1.353	1.111113
8	31.72	441.115	8.152	1.913	1.111112
9	37.89	439.339	5.859	2.383	1.111112
10	17.86	154.413	9.375	4.176	1.111112
11	12.22	173.827	11.417	1.573	1.111115
12	17.94	255.197	4.934	2.757	1.111117
13	6.77	93.246	13.393	1.357	1.111114
14	8.13	115.584	9.375	1.357	1.111117
15	11.17	158.928	8.523	1.573	1.111117
16	25.56	363.457	4.688	1.538	1.111116
17	66.83	953.476	4.573	1.467	1.111199
18	27.46	397.547	4.464	2.941	1.111112
19	34.51	348.557	8.929	1.373	1.111119
20	43.97	425.326	7.813	1.169	1.111116
21	71.78	1029.541	5.768	2.716	1.111135
22	77.97	1137.979	1.679	1.349	1.111118
23	34.11	484.913	8.523	2.941	1.111114
24	34.79	494.843	6.257	1.637	1.111112
25	33.56	477.235	5.682	2.679	1.111115

AVERAGE

	NO.	NO./AREA	MEPH	MEPH	L/A	AREA
SD	41.12	571.541	6.326	2.558	1.582	1.111119
SE	24.72	351.541	2.652	1.195	1.274	1.111119
SE	10.91	77.312	1.531	1.259	1.155	1.111114

26	17.11	243.358	11.729	2.641	1.418	1.111118
27	11.1	157.958	17.115	1.606	1.104	1.111117
28	12.25	459.713	5.168	1.921	1.635	1.111111
29	1.11	1.111	5555555555	5555555555	1.111	5555555555
30	3.65	51.922	21.833	18.625	1.101	1.111118
31	1.11	1.111	5555555555	5555555555	1.111	5555555555
32	16.95	441.111	1.375	3.676	1.317	1.111118
33	97.32	1294.515	3.472	1.359	1.860	1.111141
34	77.75	1115.721	5.218	1.259	1.536	1.111169
35	1.24	17.618	46.475	16.186	1.141	1.111113
36	1.11	1.111	5555555555	5555555555	1.111	5555555555
37	1.11	1.111	5555555555	5555555555	1.111	5555555555
38	6.19	88.142	9.375	7.137	1.176	1.111115
39	1.11	1.111	5555555555	5555555555	1.111	5555555555
40	13.52	192.339	6.466	3.125	1.392	1.111112
41	9.87	147.415	8.523	5.238	1.243	1.111116
42	59.97	852.882	4.251	1.206	1.525	1.111111
43	1.11	1.111	5555555555	5555555555	1.111	5555555555
44	1.59	22.575	62.573	14.786	1.117	1.111117
45	31.62	449.693	11.417	1.921	1.373	1.111111
46	14.32	233.526	6.696	1.178	1.355	1.111117
47	6.11	85.333	17.145	9.569	1.131	1.111117
48	7.56	117.957	22.811	7.531	1.157	1.111117
49	1.11	1.111	5555555555	5555555555	1.111	5555555555
50	1.11	1.111	5555555555	5555555555	1.111	5555555555

AVERAGE

	NO.	NO./AREA	MEPH	MEPH	L/A	AREA
SD	28.17	399.595	5555555555	5555555555	1.431	5555555555
SE	27.29	383.168	5555555555	5555555555	1.314	5555555555
SE	3.86	54.895	5555555555	5555555555	1.344	5555555555

ORIGINAL PAGE IS
OF POOR QUALITY

DATE 12/25/78

MOBILE (YUC) SAMPLE # 31 JPL # 145-74 -744 1222

DISLOCATION PITS ONLY

.31 MM STEP SIZE

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY

AVERAGE DISLOCATION PIT AREA = 4.54 μ^2

MAG-813.1 10115-VICINS CAL. FACTOR-

1.375111 INT/1222

FRAME AREA- 1.515625111 μ^2

FIELD NO.	NO./AREA	MFSD	MFSDH	L/A	AREA	
1	25.77	1.311	1562.537	948.755	1.311	1.742182
2	391.41	1.311	155.815	114.329	1.313	1.422454
3	585.46	1.317	143.328	53.643	1.321	1.114844
4	332.82	1.319	141.816	111.595	1.314	1.436171
5	517.27	1.325	135.137	51.115	1.325	1.575521
6	251.66	1.317	121.304	126.753	1.317	1.513498
7	488.55	1.314	194.199	51.941	1.314	1.417878
8	433.48	1.312	174.222	129.132	1.312	1.832781
9	456.52	1.319	86.436	74.771	1.323	1.417636
10	867.43	1.325	67.984	71.293	1.324	1.452325
11	1287.89	1.337	92.183	44.713	1.322	1.324449
12	815.77	1.323	111.194	84.059	1.315	1.770304
13	1418.15	1.343	44.143	43.564	1.317	1.115433
14	1184.36	1.334	48.879	18.954	1.314	1.473959
15	1146.92	1.333	48.752	11.413	1.315	1.415111
16	729.74	1.321	78.321	84.181	1.321	1.716559
17	148.11	1.334	324.394	279.118	1.335	1.166667
18	679.74	1.319	191.718	65.159	1.315	1.563712
19	143.83	1.334	355.211	415.844	1.314	1.33842
20	31.51	1.331	1562.537	1736.111	1.331	1.914163
21	219.43	1.337	244.778	176.222	1.347	1.412381
22	631.53	1.318	133.163	133.482	1.315	1.076333
23	1177.14	1.333	85.227	45.898	1.320	1.162767
24	289.87	1.438	169.224	188.253	1.311	1.217515
25	254.32	1.315	239.771	249.135	1.317	1.422594

AVERAGE

	NO.	NO./AREA	MFSD	MFSDH	L/A	AREA
SD	631.39	1.317	268.713	213.939	1.317	1.144410
SE	395.27	1.311	391.345	354.111	1.311	1.174125
SE	79.35	1.312	78.249	73.932	1.312	1.231825

26	972.91	1.328	127.133	42.554	1.329	1.333391
27	743.44	1.322	135.442	93.543	1.315	1.253313
28	153.44	1.314	178.134	179.942	1.317	1.114924
29	391.13	1.311	19.247	21.584	1.321	1.753947
30	1241.19	1.335	45.719	47.111	1.334	1.486721
31	564.11	1.315	84.612	92.733	1.323	1.993261
32	1941.31	1.355	10.761	37.425	1.337	1.143320
33	233.92	1.317	224.992	224.252	1.317	1.333424
34	546.48	1.321	75.454	65.549	1.323	1.771875
35	147.22	1.314	412.341	412.527	1.314	1.123197
36	191.97	1.315	237.944	258.164	1.317	1.933731
37	563.79	1.316	135.932	111.474	1.315	1.675521
38	1261.35	1.336	66.349	48.182	1.324	1.593215
39	4484.35	1.128	35.643	37.548	1.343	1.144612
40	219.18	1.336	233.239	145.929	1.370	1.777414
41	892.29	1.325	132.347	71.565	1.319	1.947341
42	42.73	1.331	1353.371	1147.293	1.312	1.111417
43	297.36	1.316	171.917	157.117	1.310	1.568057
44	216.78	1.317	213.165	214.114	1.315	1.349749
45	135.52	1.314	384.221	376.516	1.315	1.351252
46	295.15	1.318	421.414	187.124	1.337	1.499493
47	1821.15	1.352	41.145	41.743	1.343	1.127032
48	1812.11	1.352	37.111	35.72	1.345	1.991261
49	405.56	1.325	57.411	55.575	1.341	1.149916
50	716.37	1.323	84.842	84.232	1.319	1.786477

AVERAGE

	NO.	NO./AREA	MFSD	MFSDH	L/A	AREA
SD	792.45	1.323	231.241	192.265	1.319	1.293805
SE	846.39	1.324	317.947	297.384	1.315	1.447110
SE	119.71	1.333	44.963	42.115	1.312	1.235745

DATE 12/25/78
MOBIL TYCO SAMPLE # 12 LPL # 145-76 1-744 1980
TWIN ONLY
RTM OUTPIT DATA DIVIDED BY 111
.31 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
AVERAGE TWIN AREA = 27.62X1-11

MAG-832-1 UNITS-MM CAL. FACTOR- 1.114375 INITS/11
FRAME AREA- 1.171313

FIELD	NO.	NO./AREA	MPV	MPH	L/A	AREA
1	66.22	941.797	1.589	1.187	1.848	1.111117
2	32.48	461.888	6.466	2.716	2.565	1.111121
3	27.34	388.768	6.257	1.693	1.627	1.111118
4	4.89	69.515	18.757	9.768	1.125	1.111116
5	5.79	82.388	31.257	11.719	1.171	1.111118
6	32.18	456.233	6.748	2.369	1.555	1.111111
7	21.67	294.122	5.523	2.472	1.149	1.111127
8	18.85	552.514	6.257	1.995	2.581	1.111123
9	73.85	1137.738	3.676	1.472	1.165	1.111114
10	3.19	45.313	13.438	7.813	1.147	1.111112
11	25.27	359.417	13.193	1.167	1.267	1.111116
12	26.18	372.291	11.129	1.167	1.269	1.111125
13	1.54	7.724	55555555	55.11	1.11	1.111112
14	1.11	1.111	55555555	55555555	1.111	5555555555
15	42.58	615.552	7.613	1.757	1.413	1.111121
16	3.91	12.873	187.539	17.539	2.332	1.111124
17	15.53	229.974	18.757	5.682	1.197	1.111115
18	1.33	1.333	55555555	55555555	1.133	5555555555
19	1.11	1.113	55555555	55555555	1.111	5555555555
21	1.11	1.111	55555555	55555555	1.111	5555555555
21	3.55	53.463	77.537	12.537	2.493	1.111115
22	1.76	13.813	52.517	2.513	1.119	1.111113
23	19.83	556.417	3.676	1.474	1.723	1.111112
24	13.17	143.149	8.523	1.034	2.267	1.111117
25	2.66	49.679	31.257	12.597	1.185	1.111116

AVERAGE

SD	NO.	NO./AREA	MPV	MPH	L/A	AREA
	18.82	267.617	55555555	55555555	1.208	5555555555
	21.47	291.145	55555555	55555555	2.336	5555555555
SE	4.99	58.229	55555555	55555555	1.361	5555555555

26	11.19	445.441	6.914	1.167	1.337	1.111124
27	41.77	579.815	3.676	1.324	2.731	1.111111
28	1.11	1.111	55555555	55555555	1.111	5555555555
29	1.48	21.112	62.577	11.257	1.143	1.111116
31	3.95	56.127	18.757	11.129	1.117	1.111115
31	3.54	7.724	13.757	13.757	1.119	1.111112
32	2.28	32.441	37.197	17.145	1.269	1.111124
33	21.54	316.189	23.438	5.357	2.215	1.111117
34	42.25	631.917	7.533	2.138	1.344	1.111113
35	39.68	554.358	6.748	1.855	1.611	1.111119
36	32.59	463.432	1.944	1.344	1.428	1.111114
37	16.19	227.597	46.875	15.625	1.377	1.111111
38	5.13	71.575	26.786	12.597	1.131	1.111117
39	51.65	727.387	5.438	1.875	1.621	1.111114
41	23.13	284.298	7.533	1.934	1.244	1.111111
41	23.13	327.192	1.819	1.614	1.494	1.111119
42	8.22	116.111	21.413	8.129	1.171	1.111116
43	42.22	611.112	4.577	2.259	1.537	1.111115
44	13.14	186.918	62.113	17.145	2.167	1.111126
45	15.42	219.358	11.719	3.124	1.171	1.111115
46	19.44	276.515	8.523	3.179	1.355	1.111119
47	1.77	1.111	55555555	55555555	1.111	5555555555
48	14.45	235.455	15.425	1.076	1.357	1.111116
49	17.15	242.137	17.745	5.168	1.332	1.111117
51	48.41	688.454	4.688	1.431	1.832	1.111111

AVERAGE

SD	NO.	NO./AREA	MPV	MPH	L/A	AREA
	19.63	279.787	55555555	55555555	1.311	5555555555
	18.41	261.758	55555555	55555555	1.277	5555555555
SE	2.67	17.113	55555555	55555555	1.339	5555555555

DATE 12/25/79
 MODEL TDC SAMPLE # 32 JPL # 145-74 -744 1222 P
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 4.11 μ^2

MAG-831.1 UNITS-MICRONS CAL. FACTOR- 1.47517 UNITS/INCH
 FRAME AREA- 3.515625111 14

FIELD NO.	NO./AREA	MFDV	FPH	L/A	ASST	
1	1161.64	3.133	48.752	4.964	1.134	1.512151
2	398.41	3.111	131.333	111.816	1.114	1.395817
3	1831.31	3.152	31.292	12.253	1.152	1.355874
4	2574.55	3.173	25.133	27.688	1.161	1.507251
5	381.73	3.111	129.489	176.155	1.115	1.413574
6	1476.74	3.162	52.873	34.964	1.133	1.611532
7	625.84	1.118	74.761	21.381	1.122	1.233112
8	219.63	1.117	124.124	153.128	1.117	1.355414
9	582.31	1.119	81.317	42.883	1.122	1.531933
10	268.19	3.136	142.694	157.135	1.112	1.929917
11	383.32	3.111	154.959	165.929	1.111	1.793438
12	256.86	3.137	143.788	151.723	1.111	1.849317
13	623.66	3.118	74.287	79.113	1.123	1.215312
14	246.92	3.117	221.631	187.513	1.118	1.912335
15	263.82	1.118	192.931	193.549	1.130	1.269452
16	197.81	3.136	289.352	36.677	1.135	1.357675
17	351.69	3.113	120.968	125.973	1.114	1.964238
18	635.17	3.117	87.334	37.556	1.121	1.311132
19	2866.23	1.132	17.116	17.113	1.192	1.515241
20	1252.29	1.135	39.945	41.512	1.141	1.179335
21	2443.14	1.169	25.552	28.315	1.162	1.563238
22	2343.54	1.167	33.173	26.143	1.152	1.793335
23	2158.85	3.161	33.971	29.565	1.151	1.194659
24	277.73	3.138	144.676	162.478	1.111	1.244485
25	13.62	1.112	625.111	621.851	1.113	1.862353

AVERAGE

NO.	NO./AREA	MFDV	FPH	L/A	ASST
959.32	3.127	129.138	121.713	1.128	1.763155
SD 872.87	3.125	129.126	122.158	1.122	1.747477
SE 174.55	3.115	15.023	24.582	1.114	1.149605

26	338.37	3.113	171.145	135.773	1.111	1.772917
27	591.26	3.117	73.128	72.115	1.124	1.343789
28	911.34	3.126	57.942	51.516	1.122	1.551519
29	2377.36	3.157	34.114	32.554	1.151	1.197971
30	861.34	3.124	55.771	57.163	1.126	1.250511
31	811.46	3.123	61.195	61.163	1.126	1.631115
32	675.15	3.119	71.513	71.734	1.121	1.534123
33	941.15	3.127	52.883	51.153	1.129	1.744215
34	911.17	3.126	115.473	55.189	1.122	1.517664
35	251.11	3.117	194.147	194.131	1.118	1.342331
36	1126.84	3.129	51.731	51.921	1.133	1.648127
37	1536.58	3.144	38.136	41.134	1.130	1.373532
38	141.76	3.114	291.248	273.324	1.117	1.337119
39	345.95	3.113	151.916	126.519	1.117	1.575342
40	161.34	3.115	271.485	234.175	1.116	1.722913
41	321.59	3.119	149.522	149.283	1.112	1.212055
42	1664.81	3.147	37.757	31.112	1.147	1.494912
43	787.28	3.122	73.711	72.165	1.121	1.975111
44	317.55	3.119	149.531	153.629	1.111	1.342022
45	219.74	3.115	197.176	223.147	1.117	1.775369
46	545.12	3.115	22.237	15.552	1.121	1.188161
47	264.21	3.118	167.711	185.139	1.111	1.973389
48	753.48	3.121	22.237	77.736	1.121	1.175373
49	228.43	3.116	217.117	218.531	1.117	1.368892
50	117.74	3.113	273.124	216.314	1.118	1.851393

AVERAGE

NO.	NO./AREA	MFDV	FPH	L/A	ASST
814.16	3.123	132.263	119.927	1.124	1.837952
SD 722.44	3.121	115.529	111.581	1.112	1.32733
SE 112.17	3.113	15.335	12.157	1.113	1.146899

DATE 12/25/78
 MOBIL TYCO SAMPLE # 13
 JPL # 145-76 5-744 SPEC F
 TWINS ONLY
 ITEM OUTPUT DATA DIVIDED BY 100
 .01 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 11.35X10

MAG-833.1 UNITS-MM CAL. FACTOR- 1.7775, MITS/20
 FRAME 1111- 1.7775

FIELD	NJ.	NJ./AREA	MFPV	MFPH	L/A	META
1	1.42	13.999	46.475	1.251	1.111	1.111111
2	11.74	351.924	9.375	1.614	1.421	1.111111
3	12.36	171.517	12.577	1.472	1.291	1.111117
4	55.57	931.591	2.534	1.137	1.177	1.111113
5	139.43	1985.488	1.688	1.472	1.473	1.111119
6	57.79	821.917	3.757	1.442	1.789	1.111118
7	37.46	532.876	4.573	1.176	1.712	1.111111
8	39.77	565.619	5.768	1.631	1.625	1.111111
9	48.11	484.165	3.409	1.123	1.193	1.111111
10	83.63	1145.681	5.357	1.673	1.777	1.111124
11	45.47	545.747	3.289	1.338	1.632	1.111112
12	54.23	771.327	5.238	1.736	1.659	1.111116
13	51.27	729.152	5.859	1.799	1.435	1.111124
14	51.99	739.462	3.999	1.379	1.932	1.111117
15	52.45	746.722	7.517	2.132	1.571	1.111128
16	22.97	326.619	1.261	2.132	1.547	1.111112
17	23.56	292.411	3.935	1.933	1.673	1.111129
18	6.82	97.372	17.417	5.357	1.241	1.111144
19	7.32	99.813	12.171	6.196	1.213	1.111114
20	3.17	4.111	555555555	555555555	1.111	555555555555
21	3.17	4.111	555555555	555555555	1.111	555555555555
22	3.17	4.111	555555555	555555555	1.111	555555555555
23	2.54	35.383	26.194	11.119	1.114	1.111114
24	33.51	476.173	17.417	3.906	1.293	1.111129
25	51.77	726.341	9.568	1.757	1.327	1.111144

	NJ.	NJ./AREA	MFPV	MFPH	L/A	META
SD	36.29	116.186	555555555	555555555	1.441	555555555555
SE	11.19	446.411	555555555	555555555	1.115	555555555555
	5.25	89.282	555555555	555555555	1.141	555555555555

	NJ.	NJ./AREA	MFPV	MFPH	L/A	META
26	37.41	31.849	17.417	2.74	1.173	1.111123
27	2.41	14.118	2.117	12.392	1.173	1.111113
28	1.23	12.152	187.11	5.75	1.124	1.111112
29	27.45	191.391	6.944	1.633	1.797	1.111117
30	43.19	556.987	4.241	1.157	1.955	1.111113
31	6.59	93.711	24.138	4.517	1.197	1.111116
32	2.54	17.189	42.131	14.123	1.197	1.111114
33	7.77	117.731	11.129	6.152	1.197	1.111116
34	2.24	31.845	62.137	4.152	1.141	1.111112
35	32.95	458.617	93.753	127.631	1.299	1.111128
36	9.49	129.336	8.929	1.176	1.114	1.111113

	NJ.	NJ./AREA	MFPV	MFPH	L/A	META
SD	31.16	427.487	555555555	555555555	1.398	555555555555
SE	29.15	414.187	555555555	555555555	1.115	555555555555
	4.86	59.198	555555555	555555555	1.352	555555555555

	NJ.	NJ./AREA	MFPV	MFPH	L/A	META
37	11.83	167.761	5.944	1.176	1.339	1.111126
38	17.19	143.194	13.193	1.254	1.171	1.111111
39	32.42	461.109	5.466	1.633	1.669	1.111117
40	21.61	313.218	7.579	1.538	1.339	1.111111
41	44.15	527.833	6.744	1.976	1.377	1.111121
42	9.75	135.718	21.833	1.75	1.293	1.111115
43	12.88	183.225	6.323	1.178	1.245	1.111118
44	48.11	584.165	5.692	1.152	1.514	1.111116
45	11.61	164.951	7.813	1.989	1.328	1.111126
46	4.48	63.731	13.193	7.813	1.161	1.111125
47	3.53	53.141	18.753	12.393	1.114	1.111115
48	4.61	65.615	11.719	6.375	1.161	1.111115
49	1.86	12.184	187.531	31.254	1.175	1.111111
50	1.17	1.111	555555555	555555555	1.331	555555555555

	NJ.	NJ./AREA	MFPV	MFPH	L/A	META
SD	33.06	260.272	555555555	555555555	1.293	555555555555

MOBILE TYPED SAMPLE # 33 JPL 145-74 1-744 1200 P
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.71 μ^2

MAG=800.3 INITS-MICRONS CAL. FACTOR=1.375111 INITS/200
 FRAME AREA= 3.515425111 14

FIELD NO.	NO./AREA	MFV	MPH	L/A	AREA	
1	3637.37	1.113	11.111	13.246	1.172	1.754245
2	4925.44	1.143	12.101	12.387	1.134	1.701734
3	481.13	1.114	91.912	91.443	1.118	1.717434
4	1371.35	1.139	32.139	34.891	1.148	1.627392
5	11.68	1.111	1124.194	3349.214	1.111	1.702411
6	4.41	1.111	3333.333	3333.333	1.111	3333.333
7	155.26	1.114	381.198	334.921	1.115	1.748172
8	821.18	1.123	76.344	81.149	1.121	1.474331
9	358.37	1.117	127.725	127.899	1.113	1.374616
10	788.95	1.123	69.496	71.131	1.123	1.987123
11	168.25	1.135	257.555	242.976	1.136	1.594591
12	591.71	1.125	67.148	65.714	1.125	1.522833
13	1.23	1.133	13392.857	11718.753	1.133	1.333478
LAST FIELD DELETED						
13	861.93	1.125	71.131	67.112	1.124	1.245215
14	1594.39	1.145	37.311	39.497	1.142	1.345553
15	345.67	1.113	124.308	119.579	1.115	1.755488
16	447.54	1.113	128.777	137.161	1.113	1.491211
17	1935.44	1.155	31.135	32.141	1.151	1.591142
18	485.61	1.111	121.192	77.143	1.119	1.184709
19	1221.12	1.135	39.374	38.917	1.145	1.425724

FIELD # 20 AND ONWARDS STARTS AGAIN FROM FIELD # 1
 AVERAGE

NO.	NO./AREA	MFV	MPH	L/A	AREA
1774.59	1.131	555555555	555555555	1.132	555555555
SD 1232.97	1.135	555555555	555555555	1.131	555555555
SE 282.86	1.118	555555555	555555555	1.117	555555555

AVERAGE

NO.	NO./AREA	MFV	MPH	L/A	AREA
1774.59	1.131	555555555	555555555	1.132	555555555
SD 1232.97	1.135	555555555	555555555	1.131	555555555
SE 282.86	1.118	555555555	555555555	1.117	555555555

AVERAGE

NO.	NO./AREA	MFV	MPH	L/A	AREA
1774.59	1.131	555555555	555555555	1.132	555555555
SD 1232.97	1.135	555555555	555555555	1.131	555555555
SE 282.86	1.118	555555555	555555555	1.117	555555555

20	1531.88	1.143	31.726	34.929	1.148	1.777326
21	1244.74	1.135	42.459	42.594	1.139	1.814343
22	491.12	1.114	14.142	13.714	1.117	1.455552
23	1557.72	1.145	31.131	35.127	1.145	1.347479
24	1262.63	1.135	39.391	12.149	1.141	2.732285
25	857.89	1.125	53.237	55.245	1.131	1.452342
26	711.11	1.127	87.433	77.672	1.122	1.774143
27	957.72	1.127	45.422	15.246	1.136	1.634937
28	2427.72	1.169	29.397	26.679	1.157	1.248595
29	1427.32	1.141	37.173	33.343	1.143	2.334137
30	1632.46	1.145	34.237	19.233	1.147	1.333959
31	1327.19	1.156	23.142	25.773	1.171	1.984571
32	172.46	1.135	251.341	31.343	1.116	1.774597
33	151.58	1.114	274.927	245.581	1.115	1.394552
34	246.47	1.117	161.438	171.197	1.119	1.142893
35	581.75	1.117	99.522	127.147	1.116	1.724974
36	2976.23	1.125	19.371	11.416	1.121	1.742131
37	679.13	1.119	68.391	75.403	1.123	1.553313
38	6.32	1.111	4594.429	1454.429	1.111	4594.429
39	234.91	1.137	151.723	146.223	1.131	1.114193
40	1136.32	1.132	47.229	51.149	1.132	1.455476
41	4257.37	1.121	18.123	17.262	1.121	1.591471
42	4916.32	1.147	12.981	13.464	1.127	1.371333
43	2372.98	1.159	24.497	14.117	1.167	1.923177
44	437.19	1.112	133.477	117.925	1.114	1.343171
45	1344.56	1.133	54.631	61.977	1.139	1.514358
46	881.71	1.125	71.923	72.144	1.122	1.924867
47	561.93	1.119	62.127	65.159	1.127	1.119363
48	415.79	1.112	97.758	114.283	1.117	1.194556
49	237.15	1.137	161.917	171.189	1.111	1.172717
50	211.35	1.136	179.155	232.431	1.136	1.957706

AVERAGE

NO.	NO./AREA	MFV	MPH	L/A	AREA
1151.55	1.133	555555555	555555555	1.134	555555555
SD 1163.13	1.134	555555555	555555555	1.138	555555555
SE 157.31	1.115	555555555	555555555	1.114	555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 12/25/78

MOJIL (YGC) SAMPLE # 34 JPL 145-74 1-744 SPEC

TWINS ONLY

31M OUTPUT DATA DIVIDED BY 141

.31 MM STEP SIZE

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY

AVERAGE TWIN AREA = 29.16X100

MAG=800.0 INITS-MM CAL. FACTOR-
FRAME AREA= 3.477313

3.033375 INITS/PP

FIELD NO.	NO./AREA	MFRV	MFRH	L/A	AREA
1	49.53	289.635	5.218	1.784	1.437
2	112.23	1453.225	3.696	1.219	1.939
3	35.94	311.142	4.261	1.339	1.859
4	25.58	363.847	17.145	1.369	1.256
5	1.99	28.288	17.533	15.425	1.172
6	22.92	313.123	5.859	1.729	1.643
7	51.51	732.571	5.859	1.76	1.251
8	3.12	42.521	17.511	9.48	1.112
9	5.58	93.544	17.145	1.23	1.141
11	17.11	243.378	14.423	3.233	1.336
11	195.11	1494.894	7.537	1.953	1.613
12	4.85	57.552	37.511	13.193	1.388
13	145.43	2382.123	5.929	2.415	1.495
14	33.43	1186.161	5.859	1.27	1.620
15	11.18	159.391	25.786	4.934	1.221
16	3.33	3.333	555555555	555555555	1.333
17	3.94	55.389	15.425	4.466	1.152
18	3.11	3.113	555555555	555555555	1.113
19	3.13	3.133	555555555	555555555	1.113
27	3.53	53.216	21.833	12.537	1.137
21	1.65	21.411	45.075	37.511	1.137
22	3.33	3.333	555555555	555555555	1.113
23	27.19	386.771	5.768	2.197	1.573
24	44.23	628.485	4.573	1.337	1.845
25	3.91	55.531	23.438	12.493	1.491

AVERAGE

	NO.	NO./AREA	MFRV	MFRH	L/A	AREA
IS	31.81	432.111	555555555	555555555	1.145	555555555
SE	39.44	564.127	555555555	555555555	1.117	555555555
SE	7.93	112.935	555555555	555555555	1.163	555555555

26	6.52	92.452	37.511	14.423	1.181	1.13313
27	3.43	48.285	17.533	15.425	1.177	1.03315
28	3.14	3.141	555555555	555555555	1.111	555555555
29	8.44	110.982	13.393	4.927	1.204	1.11114
31	17.14	328.212	4.604	1.823	1.431	1.11111
31	11.32	145.817	14.423	4.127	1.285	1.11114
32	3.41	3.413	555555555	555555555	1.111	555555555
33	5.52	78.525	13.393	4.253	1.235	1.11119
34	56.21	799.393	4.361	1.172	1.941	1.11112
35	13.25	145.831	24.796	4.748	1.179	1.11119
36	5.14	73.161	21.833	11.129	1.131	1.11117
37	11.67	141.444	14.423	4.400	1.143	1.11116
38	5.11	72.512	25.786	7.511	1.149	1.11117
39	5.87	69.238	15.425	11.417	1.117	1.11115
41	15.43	219.479	7.212	1.717	1.429	1.11118
41	1.27	18.746	93.751	17.745	1.164	1.11113
42	14.64	218.261	5.929	4.088	1.259	1.11112
43	3.79	3.793	555555555	555555555	1.113	555555555
44	1.82	25.851	37.511	14.423	1.181	1.11114
45	61.84	865.314	2.841	1.933	1.253	1.11110
46	19.42	118.473	4.488	1.414	1.513	1.11115
47	33.71	479.439	3.233	1.823	1.729	1.11116
48	2.98	42.433	21.833	12.537	1.199	1.11114
49	3.73	52.675	24.796	10.751	1.172	1.11115
51	5.14	73.161	17.745	12.537	1.112	1.11113

AVERAGE

	NO.	NO./AREA	MFRV	MFRH	L/A	AREA
IS	22.15	313.651	555555555	555555555	1.113	555555555
SE	41.43	449.887	555555555	555555555	1.114	555555555
SE	4.47	63.424	555555555	555555555	1.144	555555555

DATE 12/25/78
 MOBIL TYCO SAMPLE # 34 JPK JPL # 145-75 1-744 JSC
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.19

MAG-800.1 INITS-MIDLINE CAL. FACTOR:- .375013 INITS/IN
 FRAME AREA- 3.51562500 IN

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	1.11	31253.833	31253.799	1.333	3.421875
2	165.49	3.335	219.261	148.818	1.393759
3	323.96	3.379	119.885	126.348	1.928554
4	1371.99	3.339	43.398	41.118	1.144169
5	512.24	3.315	92.914	93.479	1.422218
6	24.12	3.331	1892.885	1913.265	1.331
7	1993.88	3.457	31.626	37.129	1.347
8	823.41	3.923	82.965	86.723	1.319
9	117.81	3.333	323.276	152.899	1.335
10	42.38	3.331	919.118	1165.341	1.331
11	1529.68	3.344	35.714	37.711	1.344
12	3.33	3.333	555555555	555555555	1.333
13	147.26	3.334	283.689	162.197	1.334
14	2696.85	3.377	27.852	33.377	1.355
15	5897.22	3.168	13.728	14.168	1.116
16	4215.48	3.123	14.468	13.944	1.115
17	5381.15	3.145	13.732	14.883	1.118
18	2352.12	3.358	38.962	38.274	1.354
19	1786.46	3.351	27.237	28.722	1.347
20	4393.17	3.116	15.614	17.118	1.338
21	3631.93	3.132	17.513	18.939	1.322
22	353.45	3.111	126.118	122.229	1.313
23	699.37	3.323	68.985	78.452	1.324
24	2512.36	3.371	23.148	23.191	1.373
25	1492.95	3.142	38.379	38.836	1.346
26	1127.34	3.332	41.853	49.132	1.338
27	3861.63	3.114	15.284	17.655	1.112
28	762.15	3.322	61.355	73.115	1.324
29	826.35	3.324	91.115	85.173	1.319

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1648.33	3.137	333333333	333333333	1.343	333333333333
SD 1648.89	3.147	555555555	555555555	1.337	555555555555
SE 316.19	3.119	333333333	333333333	1.337	333333333333

30	181.82	3.335	225.361	191.162	1.335
31	883.12	3.325	56.273	61.735	1.325
32	632.84	3.318	146.328	9.799	1.317
33	239.28	3.316	149.795	295.741	1.316
34	413.95	3.312	129.968	118.371	1.314
35	326.16	3.339	143.349	141.493	1.311
36	1521.34	3.343	46.712	41.834	1.335
37	1182.93	3.334	52.374	53.297	1.331
38	5433.34	3.154	13.361	12.323	1.123
39	964.94	3.327	34.474	34.116	1.331
40	795.92	3.323	85.852	88.611	1.319
41	385.16	3.311	122.173	131.471	1.313
42	596.29	3.317	91.553	87.699	1.317
43	1833.21	3.329	45.372	47.929	1.337
44	813.73	3.323	82.672	36.612	1.329
45	1314.46	3.337	31.918	31.428	1.340
46	875.51	3.325	62.793	55.382	1.327
47	271.24	3.339	178.332	127.631	1.339
48	792.95	3.323	51.882	55.472	1.333
49	1846.31	3.333	46.922	57.137	1.334
50	7932.97	3.225	11.875	12.684	1.124

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1512.83	3.343	555555555	555555555	1.339	555555555555
SD 1727.27	3.349	555555555	555555555	1.335	555555555555
SE 244.27	3.337	555555555	555555555	1.335	555555555555

DATE 12/24/67
 MOIL EYE SAMPLE 735 JPL 9 145-74 5-744 1250
 TWINS ONLY
 JFM DIFF-IF DATA DIVIDED BY 111
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 29.54X111

MAG-833.3 INITS-MM CAL. FACTOR- 1.11175 INITS/PS
 FRAME AREA- 1.17313

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	3.27	3.849	187.533	42.533	1.11175
2	3.38	48.113	31.253	14.423	1.11177
3	1.91	14.434	93.753	37.533	1.11174
4	14.72	219.292	8.152	1.344	1.11176
5	4.16	59.179	46.875	11.119	1.11176
6	8.73	121.112	9.848	4.147	1.11175
7	1.11	1.111	555555555	555555555	1.111
8	4.83	57.255	18.753	11.429	1.11174
9	8.53	121.245	9.175	6.448	1.11179
10	8.42	119.832	11.719	6.696	1.11179
11	1.33	1.111	555555555	555555555	1.111
12	2.74	38.972	24.786	11.423	1.11176
13	7.24	142.962	9.868	4.688	1.11177
14	5.19	85.614	15.625	7.112	1.11175
15	9.57	136.161	8.523	1.924	1.11174
16	15.16	215.547	8.523	1.676	1.11177
17	12.96	184.273	13.417	1.573	1.11179
18	4.61	94.332	13.193	5.357	1.11179
19	1.11	1.111	555555555	555555555	1.111
20	3.11	1.111	555555555	555555555	1.111
21	1.11	1.111	555555555	555555555	1.111
22	1.42	23.277	187.439	31.253	1.11176
23	3.11	1.111	555555555	555555555	1.111
24	1.11	1.111	555555555	555555555	1.111
25	3.11	1.111	555555555	555555555	1.111

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	4.61	65.453	555555555	555555555	1.111	555555555
SD	4.91	12.816	555555555	555555555	1.118	555555555
SE	1.97	13.761	555555555	555555555	1.128	555555555

26	1.59	22.413	42.533	17.533	1.141	1.11177
27	2.37	33.479	24.786	14.423	1.177	1.11173
28	1.11	1.111	555555555	555555555	1.111	555555555
29	1.11	1.111	555555555	555555555	1.111	555555555
30	1.11	1.111	555555555	555555555	1.111	555555555
31	1.11	1.111	555555555	555555555	1.111	555555555
32	1.11	1.111	555555555	555555555	1.111	555555555
33	2.11	24.397	42.533	31.253	1.143	1.11178
34	1.11	1.111	555555555	555555555	1.111	555555555
35	14.85	211.216	7.533	1.464	1.114	1.11172
36	6.29	59.491	17.145	4.261	1.259	1.11173
37	42.12	599.118	5.278	3.178	1.584	1.11172
38	21.38	134.175	11.719	1.472	1.325	1.11175
39	6.81	96.737	17.145	1.176	1.275	1.11175
40	43.81	623.464	5.168	1.234	1.891	1.11173
41	85.69	1218.714	3.289	1.715	1.485	1.11173
42	45.75	661.923	1.789	1.463	1.795	1.11171
43	71.41	1115.667	7.813	1.331	1.813	1.11172
44	39.99	568.496	8.152	1.534	1.451	1.11178
45	52.54	747.196	5.515	1.576	1.719	1.11177
46	34.33	484.417	3.324	1.913	1.645	1.11171
47	94.21	137.848	13.193	4.176	1.275	1.11174
48	48.68	692.347	1.682	1.524	1.721	1.11173
49	123.43	1712.825	3.989	1.459	1.727	1.11176
50	79.43	1129.214	11.129	1.841	1.197	1.11173

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
	16.89	241.191	555555555	555555555	1.241	555555555
SD	26.36	174.242	555555555	555555555	1.311	555555555
SE	1.73	51.411	555555555	555555555	1.344	555555555

DATE 12/26/78
 MJJIL (Y2) SAMPLE # 75 JPL # 145-76 S-744 T300 1
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.75 μ^2

MAG-831.1 INITS-MICRONS CAL. FACTOR-
 FRAME AREA- 3.515625111 44

3.175117 INITS/22

FIELD NO.	NO./AREA	MPDV	MPDM	L/A	AREA	
1	879.92	3.325	62.127	65.422	3.324	3.333576
2	1399.43	3.331	44.579	45.333	3.338	1.293775
3	853.83	3.325	57.657	56.337	3.329	1.419336
4	733.98	3.323	83.819	78.649	3.321	1.598481
5	11436.44	3.324	11.845	12.412	3.333	13.433761
6	1458.14	3.341	43.829	42.287	3.343	3.422785
7	4139.66	3.317	15.336	15.898	3.333	3.833361
8	2878.52	3.383	22.799	23.716	3.372	2.577661
9	1398.48	3.343	44.549	43.514	3.342	3.119133
10	4745.72	3.316	14.805	15.254	3.304	6.717731
11	11264.17	3.377	8.755	9.452	3.395	9.639149
12	4941.12	3.383	23.353	23.041	3.381	5.235137
13	4337.53	3.323	14.423	14.748	3.315	3.842536
14	1231.63	3.335	38.823	43.849	3.342	1.539353
15	837.53	3.324	59.148	57.799	3.329	1.753779
16	828.33	3.324	57.586	58.194	3.333	1.291623
17	4664.96	3.333	14.831	17.395	3.395	4.419313
18	2555.49	3.373	22.338	23.148	3.374	3.194319
19	3279.55	3.393	18.524	23.344	3.384	3.535218
20	1852.84	3.353	27.293	27.329	3.361	1.673543
21	9138.41	3.253	9.433	9.535	3.169	5.733657
22	3535.33	3.333	18.724	19.786	3.395	3.733015
23	12141.85	3.345	7.228	7.461	3.322	8.891856
24	1678.41	3.348	32.136	32.768	3.351	1.834114
25	1791.85	3.351	32.451	32.153	3.353	1.873878
AVERAGE						
	NO.	NO./AREA	MPDV	MPDM	L/A	AREA
	3714.17	3.336	31.411	31.698	3.379	3.331668
SD	3643.28	3.334	19.738	19.279	3.352	3.947731
SE	738.66	3.321	3.948	3.856	3.313	1.555146
26	2335.13	3.357	34.863	37.340	3.362	1.753111
27	2223.33	3.363	23.941	26.411	3.360	1.847417
28	1741.13	3.353	31.146	31.513	3.355	1.478016
29	3925.52	3.312	15.167	17.355	3.331	3.680510
30	1467.12	3.357	21.491	21.782	3.374	3.841250
31	5516.82	3.357	14.259	15.128	3.311	4.211929
32	5418.52	3.354	12.766	13.424	3.325	3.197315
33	1591.48	3.343	32.439	33.772	3.349	1.735348
34	6381.25	3.382	15.419	15.239	3.335	3.353761
35	881.44	3.325	41.155	51.426	3.329	1.454375
36	718.56	3.323	41.833	52.521	3.329	1.249488
37	338.93	3.339	34.662	33.487	3.331	1.146797
38	1317.83	3.337	39.457	39.772	3.342	1.614635
39	834.93	3.324	71.423	65.448	3.325	1.741679
40	524.81	3.310	141.182	77.845	3.316	3.931541
41	71.11	3.332	433.862	433.123	3.333	1.133859
42	188.37	3.335	253.378	195.313	3.337	1.333709
43	1198.48	3.334	54.316	59.394	3.333	3.145146
44	993.34	3.339	42.433	49.016	3.329	1.919917
45	489.58	3.314	253.468	99.788	3.312	3.431464
46	2115.49	3.363	32.849	39.935	3.351	3.252709
47	554.17	3.319	113.436	81.735	3.317	3.217094
48	19.62	3.331	876.148	922.369	3.332	1.977232
49	1.11	3.333	55555555 55555555		3.333	5555555555
50	76.89	3.332	459.559	424.238	3.334	1.934253
AVERAGE						
	NO.	NO./AREA	MPDV	MPDM	L/A	AREA
	2734.46	3.377	55555555 55555555		3.361	5555555555
SD	3341.34	3.387	55555555 55555555		3.349	5555555555
SE	413.13	3.312	55555555 55555555		3.337	5555555555

DATE 12/26/78
 MOBIL TYCO SAMPLE # 16 JPL # 145-76 5-744 2500
 TWINS ONLY
 0.31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE TWIN AREA = 26.15X100

MAG-800.7 UNITS-MM CAL. FACTOR- 0.133375 UNITS/PP
 FRAME AREA- 3.973313

FIELD	NO.	NO./AREA	MPV	MPH	L/A	AREA
1	39.25	433.232	6.348	2.757	1.435	1.333319
2	13.25	145.757	8.523	4.167	1.285	1.333376
3	21.17	329.586	8.523	3.233	1.357	1.333317
4	22.18	315.445	7.212	2.799	1.415	1.333314
5	21.27	288.252	8.929	1.148	1.349	1.333312
6	9.13	129.441	23.438	11.029	0.115	1.333317
7	36.94	525.379	5.682	1.488	1.739	1.333311
8	14.03	199.671	15.625	4.464	0.253	1.333313
9	11.43	162.617	8.929	1.724	1.363	1.333315
10	2.18	31.011	127.477	31.257	1.735	1.333318
11	1.49	21.211	37.133	23.438	1.754	1.333313
12	3.25	46.229	37.597	14.423	1.385	1.333304
13	2.79	39.733	62.593	18.758	1.361	1.333319
14	11.55	164.249	15.625	4.076	1.275	1.333308
15	20.61	293.146	8.929	1.568	1.437	1.333319
16	8.49	127.739	23.438	9.175	1.128	1.333313
17	54.76	778.823	9.375	2.679	1.437	1.333320
18	12.77	181.553	11.129	1.511	1.443	1.333315
19	35.76	512.873	6.944	1.717	1.435	1.333327
20	19.69	283.393	1.357	2.287	0.541	1.333379
21	0.30	0.033	555555555	2.287	1.094	1.333333

LAST FIELD DELETED

21	0.30	0.033	555555555	555555555	1.333	55555555555
22	4.21	59.836	11.253	12.593	0.383	1.333315
23	15.95	226.794	8.152	2.183	0.515	1.333318
24	21.91	311.638	7.212	1.875	1.589	1.333317
25	13.12	186.548	8.929	2.976	1.365	1.333315

AVERAGE

	NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	16.26	231.232	555555555	555555555	1.311	55555555555
SE	12.74	181.162	555555555	555555555	1.193	55555555555
SE	2.55	36.232	555555555	555555555	1.139	55555555555

26	16.11	797.859	5.859	1.757	1.448	1.333329
27	71.13	997.459	5.682	1.218	1.911	1.333318
28	24.17	343.726	6.696	1.539	1.469	1.333313
29	58.62	833.754	5.859	2.236	1.536	1.333311
30	4.36	62.331	37.537	0.868	0.112	1.333315
31	4.28	51.911	11.253	1.606	1.171	1.333313
32	1.84	26.136	11.253	15.625	1.777	1.333302
33	23.38	289.883	5.682	2.534	1.448	1.333317
34	13.58	193.174	8.152	1.178	1.368	1.333316
35	32.85	467.185	4.573	1.633	1.712	1.333313
36	41.19	585.749	5.859	1.197	1.557	1.333317
37	55.76	792.964	4.696	1.875	1.595	1.333321
38	1.45	23.667	93.753	11.257	1.137	1.333315
39	21.27	288.252	9.375	2.167	1.623	1.333317
40	67.83	964.283	4.251	1.226	1.349	1.333313
41	31.97	454.676	7.212	1.856	1.584	1.333315
42	118.97	1691.982	3.472	1.231	1.376	1.333323
43	67.46	959.388	4.573	1.178	1.329	1.333312
44	175.93	1576.522	3.534	1.325	1.114	1.333325
45	59.71	651.613	4.167	1.417	1.910	1.333321
46	77.44	1115.472	3.189	1.119	1.131	1.333311
47	18.55	263.777	23.833	4.818	1.227	1.333311
48	13.88	197.425	23.833	5.859	1.189	1.333314
49	57.39	811.999	8.523	2.474	1.464	1.333326
50	36.33	516.677	8.929	2.183	1.574	1.333315

AVERAGE

	NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	29.35	417.464	555555555	555555555	1.449	55555555555
SE	27.29	326.872	555555555	555555555	1.325	55555555555
SE	1.85	46.712	555555555	555555555	1.146	55555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 12/16/78
 MODEL TUCO SAMPLE # 36 JPL # 145-75 1-740 1982
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA = 5.91 μ^2

MAG=831.1 INIFS-MICROSCOPE CAL. FACTOR=1.375117 INIFS/ μ^2
 FRAME AREA= 3.515625000 μ^2

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1	463.75	1.313	17.265	1.313	1.715133
2	1462.33	1.142	33.594	1.142	1.971333
3	2118.31	1.161	27.188	1.161	1.934179
4	2378.64	1.168	24.143	1.168	1.951308
5	1553.19	1.344	33.184	1.344	1.675979
6	1314.75	1.337	42.536	1.337	1.267834
7	1241.53	1.335	43.133	1.335	1.418924
8	2613.39	1.374	24.927	1.374	1.393148
9	1582.20	1.343	32.941	1.343	1.924831
10	3438.47	1.197	19.525	1.197	1.115433
11	2319.83	1.146	22.437	1.146	1.141973
12	7544.24	1.217	13.478	1.217	1.920746
13	5531.56	1.169	12.936	1.169	1.614117
14	1836.44	1.352	26.573	1.352	1.966328
15	1242.85	1.335	41.110	1.335	1.392511
16	1321.86	1.338	36.635	1.338	1.636917
17	12523.39	1.356	17.719	1.356	1.3683673
18	474.17	1.313	138.633	1.313	1.377339
19	713.39	1.323	37.942	1.323	1.231210
20	3884.92	1.111	17.458	1.111	1.945246
21	3432.33	1.398	16.272	1.398	1.491265
22	4296.27	1.122	14.454	1.122	1.314213
23	2319.15	1.366	19.275	1.366	1.853165
24	1152.27	1.134	35.391	1.134	1.393266
25	1544.02	1.344	46.828	1.344	1.553387

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
2739.72	1.078	14.913	11.946	1.078	1.276819
SD 2574.83	1.373	24.416	17.179	1.373	1.395347
SE 514.96	1.315	4.883	3.556	1.315	1.679769

26	632.71	1.317	59.486	1.317	1.136333
27	1171.53	1.331	42.133	1.331	1.597766
28	155.59	1.334	28.112	1.334	1.694484
29	839.49	1.124	45.291	1.124	1.120715
30	481.86	1.314	11.193	1.314	1.175873
31	1269.15	1.136	37.894	1.136	1.914545
32	1171.68	1.332	31.664	1.332	1.886403
33	3344.41	1.197	19.373	1.197	1.107915
34	3756.17	1.117	13.184	1.117	1.331337
35	1396.61	1.343	33.369	1.343	1.638967
36	1878.1	1.153	26.536	1.153	1.998498
37	699.66	1.323	55.837	1.323	1.184604
38	595.25	1.117	65.221	1.117	1.333177
39	1394.24	1.331	35.823	1.331	1.327333
40	2314.77	1.158	24.423	1.158	1.335755
41	95.95	1.313	382.453	1.313	1.040127
42	372.13	1.111	13.135	1.111	1.135133
43	4.41	1.113	721.530	1.113	1.914143
44	233.85	1.317	171.389	1.317	1.992397
45	287.68	1.318	279.851	1.318	1.154351
46	536.44	1.315	98.788	1.315	1.764463
47	8.81	1.333	3472.222	1.333	1.013513
48	654.58	1.119	69.444	1.119	1.641773
49	1553.73	1.144	39.843	1.144	1.111930
50	744.34	1.321	56.922	1.321	1.333325

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AFETA
1861.84	1.353	272.223	252.169	1.353	1.444727
SD 2119.46	1.363	1172.479	1712.157	1.363	1.655573
SE 299.74	1.339	155.914	143.183	1.339	1.365594

AGE 12 / 26/78
MOBIL TYCO SAMPLE # 37 P/L # 145-76 5-744 REC C
TWIN ONLY
QTM OUTPUT DATA DIVIDED BY 133
.41 MM STEP SIZE
MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
AVERAGE TWIN AREA = 25.53X133

MAG-833.1 UNITS-MM CAL. FACTOR- 1.133375 UNITS/PP
FRAME AREA- 9.371113

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	35.25	591.371	4.838	2.373	1.491	1.111114
2	79.71	1123.628	5.515	1.474	1.677	1.111332
3	41.28	587.161	6.148	1.187	1.523	1.111325
4	3.72	52.922	13.393	11.117	1.165	1.111113
5	27.34	388.941	5.218	1.752	1.651	1.111118
6	95.13	1351.473	5.357	1.769	1.643	1.111338
7	87.74	1247.857	4.363	1.856	1.643	1.111326
8	76.53	1187.975	3.439	1.413	1.793	1.111118
9	11.44	163.657	8.929	1.936	1.299	1.111116
10	42.84	619.444	3.138	1.235	1.974	1.111113
11	27.73	384.324	5.368	2.885	1.435	1.111316
12	2.97	41.224	31.253	17.145	1.389	1.111333
13	14.25	232.777	11.129	1.838	1.245	1.111339
14	34.98	497.471	5.859	1.187	1.523	1.111325
15	2.82	47.111	37.533	26.786	1.751	1.111333
16	3.13	1.171	333333333	333333333	1.373	1.111333
17	2.19	38.411	45.775	15.625	1.377	1.111347
18	29.38	417.819	4.688	1.174	1.611	1.111113
19	11.73	126.713	7.538	1.132	1.895	1.111117
20	14.96	212.814	6.868	1.439	1.341	1.111331
21	11.79	167.681	6.259	4.176	1.344	1.111338
22	19.47	276.868	4.688	2.144	1.574	1.111336
23	28.28	432.211	6.253	1.717	1.429	1.111333
24	2.19	31.196	37.533	12.133	1.388	1.111334
25	9.64	137.41	15.625	7.112	1.165	1.111325
26	47.51	75.737	5.218	1.116	1.573	1.111316
27	24.99	355.416	9.868	1.688	1.261	1.111333
28	89.58	1274.339	3.233	1.333	1.891	1.111336

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	31.85	453.184	333333333	333333333	1.441	1.111333
SE	28.39	473.818	333333333	333333333	1.371	1.111333
	5.37	76.313	333333333	333333333	1.151	1.111333

29	147.38	2391.831	3.538	1.143	1.318	1.111339
30	133.45	1471.243	3.148	1.165	1.383	1.111334
31	31.23	429.538	13.393	5.515	1.235	1.111318
32	65.66	1218.331	3.976	1.396	1.316	1.111324
33	43.16	413.931	6.348	1.856	1.618	1.111314
34	175.68	2498.498	5.515	1.442	1.787	1.111315
35	84.84	1236.633	3.757	1.189	1.765	1.111331
36	57.66	823.123	4.934	1.752	1.613	1.111327
37	49.31	711.352	4.573	1.184	1.977	1.111317
38	16.73	237.373	9.868	1.176	1.314	1.111318
39	42.38	432.759	4.934	1.389	1.819	1.111314
40	3.72	42.795	31.253	11.129	1.115	1.111334
41	3.55	7.199	187.533	45.775	1.327	1.111332
42	16.41	233.416	11.417	1.166	1.197	1.111321
43	99.33	1412.752	1.674	1.159	1.859	1.111341
44	73.65	1034.971	4.167	1.133	1.79	1.111323
45	134.47	1912.452	4.361	1.212	1.587	1.111335
46	94.14	1355.57	1.751	1.11	1.519	1.111313
47	181.17	3541.448	7.533	2.738	1.573	1.111322
48	67.69	962.632	4.167	1.188	1.773	1.111312
49	43.99	625.533	1.253	1.132	1.519	1.111323
50	95.18	1219.975	4.838	1.234	1.993	1.111322
51	115.27	1638.369	5.859	1.913	1.597	1.111341

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	51.78	736.717	333333333	333333333	1.453	1.111333
SE	45.27	643.811	333333333	333333333	1.327	1.111333
	6.34	91.152	333333333	333333333	1.146	1.111333

DATE 12/26/78
 MOBIL TYPED SAMPLE # 37 - JPL # 145-76 - 744 1980
 DISLOCATION PITS ONLY
 .31 MM STAIN SLIT
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION PIT AREA=5.300

MAG-877.7 INITS-MICRONS CAL. FACTOR- 0.775109 INITS/PP
 FRAME AREA- 3.515625777 74

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	764.05	3.322	65.559	67.738	1.394386
2	263.61	3.337	162.767	175.234	1.376238
3	952.58	3.327	61.319	67.054	1.289522
4	6178.33	3.174	15.457	14.235	1.936416
5	1426.58	3.341	39.487	39.213	1.957469
6	563.67	3.316	98.755	95.449	1.794643
7	847.74	3.324	96.451	92.365	1.499824
8	319.12	3.339	197.481	289.352	1.989319
9	1846.46	3.353	33.184	28.452	1.833211
10	585.39	3.317	68.481	76.158	1.717287
11	3894.77	3.111	16.664	18.531	1.389572
12	4145.51	3.118	15.557	15.923	1.328483
13	1755.26	3.359	31.468	26.494	1.559193
14	1371.53	3.328	64.256	59.174	1.974782
15	1396.37	3.349	38.647	34.492	1.321147
16	1811.33	3.351	27.745	29.379	1.619861
17	4983.17	3.142	12.795	13.400	1.529379
18	1777.36	3.350	29.752	28.574	1.615443
19	1015.33	3.329	42.633	36.619	1.152344
20	682.98	3.319	72.282	71.489	1.372439
21	1581.26	3.345	35.988	37.985	1.944764
22	1183.56	3.334	33.817	44.495	1.453951
23	734.42	3.321	43.438	38.449	1.892323
24	2431.55	3.359	22.417	24.453	1.777562
25	317.78	3.339	131.487	145.575	1.316168
26	1431.93	3.341	43.672	41.253	1.348912
27	886.81	3.325	45.554	47.979	1.397467

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1655.39	3.347	62.819	63.171	1.346	1.157371
SD 1442.96	3.341	58.681	58.495	1.331	1.168371
SE 277.71	3.338	11.291	11.257	1.336	1.224853

28	347.74	3.313	144.319	141.977	1.311	1.553377
29	37.19	3.311	113.423	1339.286	1.331	1.196141
30	121.99	3.333	313.545	144.169	1.337	1.313241
31	3481.69	3.199	18.924	18.548	1.386	1.318971
32	57.74	3.332	663.211	522.368	1.332	1.884764
33	1747.34	3.357	32.529	16.432	1.349	1.972217
34	7.08	3.333	555555555	555555555	3.333	555555555555
35	847.23	3.324	51.853	57.951	1.329	1.186475
36	192.16	3.335	416.667	434.928	3.334	1.997537
37	439.58	3.313	113.155	113.225	1.315	1.289735
38	971.71	3.326	49.535	57.165	1.331	1.431435
39	831.74	3.324	63.334	57.692	1.328	1.671343
40	1327.46	3.338	34.893	36.693	1.343	1.478148
41	1587.38	3.345	29.528	29.611	1.356	1.248988
42	969.64	3.328	49.738	52.966	1.334	1.534458
43	117.55	3.343	597.134	473.485	1.333	1.684538
44	739.77	3.321	69.293	65.286	3.325	1.453733
45	42.26	3.311	884.434	1033.421	1.332	1.971191
46	7.76	3.333	31251.171	18751.713	1.333	1.562511
47	0.13	3.333	555555555	555555555	3.333	555555555555
48	137.21	3.314	556.736	337.797	1.335	1.569928
49	691.63	3.323	65.985	71.915	1.323	1.567778
50	134.73	3.334	322.145	271.173	1.334	1.123276

AVERAGE					
NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1189.71	3.334	555555555	555555555	1.334	555555555555
SD 1292.91	3.337	555555555	555555555	1.331	555555555555
SE 182.84	3.335	555555555	555555555	1.334	555555555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 12/28/77

MODEL (Y2) #38 JPL # 145-78 S-744 SPECIMEN 1

TWIN ONLY

TIME DIFFER DIVIDED BY 111

.31 MM STEP SIZE

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE

AVERAGE TWIN AREA =29.1X111

MAG-817.1 UNITS-MM CAL. FACTOR-

0.111175 UNITS/IN

FRAME AREA-

0.371313

FIELD	NO.	NO./AREA	MPV	MPH	L/A	AREA
1	3.23	54.437	23.438	8.523	3.133	1.111174
2	34.21	484.498	7.511	2.435	1.464	1.111114
3	24.24	344.766	17.115	4.918	1.215	1.111125
4	82.75	1177.311	4.588	1.349	1.784	1.111123
5	97.72	1189.854	3.576	1.725	1.123	1.111144
6	29.31	416.858	9.375	2.232	2.496	1.111111
7	42.34	632.238	9.848	2.315	1.475	1.111117
8	132.24	1454.111	4.363	1.551	1.740	1.111141
9	139.41	1556.117	4.571	1.680	1.711	1.111151
10	51.76	736.123	5.762	1.524	1.741	1.111118
11	132.13	1452.118	3.827	1.252	1.283	1.111117
12	78.52	1116.691	5.859	1.267	1.835	1.111119
13	55.13	925.914	4.361	1.157	3.949	1.111111
14	21.34	333.571	12.511	2.976	1.345	1.111119
15	68.97	981.841	5.168	1.828	1.627	1.111123
16	139.52	1557.579	5.859	1.854	1.624	1.111153
17	112.62	1631.716	5.515	1.165	1.939	1.111123
18	15.69	223.142	13.417	2.435	2.451	1.111114
19	12.17	173.119	14.423	2.534	1.421	1.111114
20	5.34	74.544	25.766	2.511	2.140	1.111114
21	138.79	1547.281	5.165	1.112	2.053	1.111141
22	79.14	1125.517	3.827	1.952	1.181	1.111121
23	87.13	1237.824	3.916	1.919	1.233	1.111127
24	41.48	575.755	5.357	1.151	3.939	1.111119
25	59.28	715.134	4.934	1.173	3.971	1.111119

AVERAGE						
	NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	61.39	873.146	8.292	2.258	2.718	1.111122
SE	7.23	112.841	6.769	1.111	1.321	1.111114

26	48.41	688.952	2.799	1.791	1.432	1.111110
27	93.72	1132.966	4.167	1.931	1.213	1.111122
28	118.17	1538.452	3.138	1.131	1.134	1.111141
29	93.97	1136.398	3.538	1.593	1.219	1.111121
30	51.97	739.165	4.934	1.125	1.741	1.111111
31	97.76	1391.345	2.885	1.563	1.931	1.111113
32	72.48	1139.846	3.538	1.935	1.388	1.111114
33	57.14	812.624	5.944	2.155	2.533	1.111147
34	55.38	787.617	4.938	1.563	3.731	1.111123
35	79.38	1128.957	2.199	1.788	1.419	1.111118
36	98.48	1433.644	4.176	1.157	3.974	1.111129
37	114.76	1632.123	3.289	1.319	1.112	1.111124
38	67.52	963.245	2.568	1.863	1.317	1.111114
39	61.59	877.164	3.827	1.169	1.864	1.111118
40	25.52	377.134	5.768	1.488	3.755	1.111111
41	76.34	1185.793	4.864	1.737	1.329	1.111119
42	96.59	1373.671	2.641	1.717	1.584	1.111121
43	17.24	245.211	11.417	2.315	1.456	1.111130
44	2.14	31.416	37.511	13.393	1.185	1.111114
45	1.11	1.111	3555555555	3555555555	1.111	3555555555
46	24.91	354.184	17.145	4.194	1.179	1.111151
47	4.45	51.251	14.423	1.153	1.171	1.111110
48	12.13	277.713	5.515	2.111	1.541	1.111110
49	14.75	219.917	4.138	1.533	1.477	1.111110
50	49.85	739.149	2.976	1.234	1.943	1.111121

AVERAGE						
	NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	59.35	844.184	3555555555	3555555555	1.797	3555555555
SE	35.69	517.612	3555555555	3555555555	1.419	3555555555
	5.15	71.786	3555555555	3555555555	2.159	3555555555

0415 12225776
 MODEL PLY 7 48 JPL 7 145-73 5-7AM SPECIMEN 7
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE IN THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 4.91 μ^2

MAG-833.3 UNITS-MICRONS CAL. FACTOR-
 FRAME AREA- 3.515625311 74

3.375333 UNITS/22

FIELD NO.	NO./AREA	MEPV	MEPM	L/A	AREA
1 1922.24	3.353	34.278	16.714	1.747	2.731724
2 1163.47	3.333	45.233	46.377	3.334	1.719398
3 3747.35	3.115	17.414	17.719	3.394	2.425487
4 7144.19	3.214	13.485	11.119	1.131	5.591671
5 965.71	3.327	54.681	51.911	3.332	1.419349
6 86.94	3.332	558.335	515.117	3.333	1.883976
7 579.39	3.314	77.351	85.695	3.321	1.271447
8 193.82	3.315	253.378	113.774	3.311	1.241410
9 741.22	3.321	117.925	55.734	3.327	2.435947
10 447.55	3.313	131.171	114.999	3.314	1.185882
11 232.65	3.337	160.311	168.919	3.317	1.785846
12 148.78	3.334	397.625	314.723	3.335	1.384984
13 368.98	3.313	114.315	128.777	1.317	1.374324
14 633.82	3.317	197.883	48.531	1.323	1.237878
15 35.10	3.331	1488.795	1423.455	3.332	1.151784
16 5.92	3.333	5514.774	4251.344	1.333	1.470488
17 617.76	3.318	132.979	81.128	3.318	1.433761
18 2241.84	3.364	26.963	29.288	3.353	1.719458
19 1148.98	3.333	62.458	57.395	3.327	1.595709
20 3.33	3.333	555555555	555555555	3.333	1.111111111
21 43.41	3.331	255.453	323.276	1.335	1.397748
22 2873.82	3.382	17.874	18.867	3.380	1.639444
23 942.24	3.327	52.173	51.141	1.332	1.253419
24 4386.94	3.125	15.882	14.567	3.131	1.743381
25 75.51	3.332	341.969	541.938	1.335	1.944323
26 44.29	3.311	1562.533	1132.941	1.311	1.334375
27 93.47	3.333	623.851	222.156	3.313	1.238582

AVERAGE					
NO.	NO./AREA	MEPV	MEPM	L/A	AREA
1141.63	3.332	555555555	555555555	1.333	1.111111111
SD 1641.75	3.347	555555555	555555555	1.334	1.111111111
SE 315.75	3.339	555555555	555555555	1.337	1.111111111

28 482.34	3.314	133.934	94.749	3.317	1.287427
29 569.18	3.316	92.792	89.454	1.318	1.443444
30 1463.67	3.342	51.853	33.981	3.347	2.584758
31 59.18	3.332	571.646	519.511	1.333	1.882913
32 23.47	3.331	1333.223	1414.379	3.331	1.735385
33 97.96	3.333	379.324	324.655	1.334	1.854433
34 171.22	3.335	243.385	135.131	1.333	1.125051
35 23.27	3.331	1994.621	997.311	1.331	1.433135
36 189.14	3.335	219.555	227.569	1.333	1.129318
37 835.11	3.324	57.233	58.122	3.333	1.233844
38 784.78	3.322	62.292	62.127	3.324	1.379248
39 264.82	3.338	172.335	174.222	3.311	1.187117
40 139.59	3.333	444.313	373.536	1.334	1.217904
41 48.16	3.331	876.168	876.168	1.332	1.857942
42 571.84	3.316	93.753	133.267	1.317	1.481323
43 1332.86	3.337	44.388	51.144	3.334	2.143253
44 983.41	3.328	51.425	52.757	1.331	1.175335
45 134.93	3.334	274.927	294.811	3.334	1.923124
46 418.16	3.312	135.477	133.929	3.312	1.631781
47 3332.34	3.394	18.897	19.354	3.385	2.194133
48 4583.41	3.133	15.377	14.195	3.134	2.946742
49 4278.37	3.122	16.828	17.579	3.122	1.334117
50 4229.18	3.123	18.411	19.342	3.125	3.938773

AVERAGE					
NO.	NO./AREA	MEPV	MEPM	L/A	AREA
1115.75	3.332	555555555	555555555	1.339	1.111111111
SD 1556.11	3.344	555555555	555555555	3.333	1.111111111
SE 221.77	3.336	555555555	555555555	1.335	1.111111111

AVERAGE					
NO.	NO./AREA	MEPV	MEPM	L/A	AREA
8829.39	3.251	8.439	8.437	1.185	4.257523
1266.99	3.334	555555555	555555555	3.333	1.111111111
SD 1875.77	3.333	555555555	555555555	1.333	1.111111111
SE 262.63	3.317	555555555	555555555	1.335	1.111111111

DATE 12/18/78
 MOBILE (YCS) # 19 JPL 144-11 5-741 1980
 TWIN ONLY
 (FM OUTPUT DIVISION) BY 111
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN ARE = 27.447141

MAG-891.1 INITS-MM CAL. FACTOR- 1.133375 INITS/22
 FRAME AREA- 1.171113

FIELD	NO.	NO./AREA	MPV	MPH	L/A	AREA
1	55.94	795.594	3.676	1.759	1.997	1.133375
2	35.39	513.272	6.948	1.838	3.616	1.133375
3	73.81	1149.563	3.827	1.957	1.179	1.133375
4	97.41	1385.423	3.233	1.159	3.883	1.133375
5	155.39	2217.942	4.357	1.293	7.885	1.133375
6	82.22	1169.291	5.368	1.218	3.883	1.133375
7	28.32	412.721	9.848	2.933	3.389	1.133375
8	33.49	475.121	7.212	1.974	1.544	1.133375
9	7.33	111.132	14.423	5.357	1.273	1.133375
10	43.33	616.252	6.257	1.736	3.672	1.133375
11	3.33	1.103	55555555	55555555	1.133	55555555
12	3.33	1.113	55555555	55555555	1.133	55555555
13	0.03	1.113	55555555	55555555	1.133	55555555
14	3.33	1.113	55555555	55555555	1.133	55555555
15	3.87	12.439	93.753	31.253	3.337	1.133375
16	3.87	1.733	55555555	55555555	3.333	55555555
17	3.87	1.733	55555555	55555555	3.333	55555555
18	4.62	8.811	187.533	46.875	3.324	1.133375
19	1.28	18.141	187.533	46.875	1.127	1.133375
20	3.33	1.113	55555555	55555555	1.133	55555555
21	2.62	17.312	42.573	19.753	1.144	1.133375
22	1.28	18.141	46.875	31.253	1.143	1.133375
23	3.86	54.943	31.253	13.393	1.093	1.133375
24	3.33	1.113	55555555	55555555	1.133	55555555
25	5.58	79.393	17.345	8.152	1.152	1.133375

AVERAGE

	NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	25.14	357.534	55555555	55555555	1.338	55555555
SE	39.16	556.919	55555555	55555555	1.386	55555555
	7.83	111.384	55555555	55555555	1.177	55555555

26	5.14	73.381	14.423	8.523	1.157	1.133375
27	26.13	371.623	1.472	1.465	1.843	1.133375
28	1.49	21.253	62.533	31.253	1.437	1.133375
29	3.53	122.119	18.753	1.559	1.103	1.133375
30	3.48	1211.425	1.419	1.031	1.200	1.133375
31	91.93	1293.165	4.454	1.794	1.352	1.133375
32	88.88	1264.143	4.167	3.848	1.293	1.133375
33	56.71	835.479	4.688	1.725	1.453	1.133375
34	66.76	949.538	2.976	3.831	1.353	1.133375
35	74.13	1954.227	3.348	1.194	1.172	1.133375
36	32.58	463.362	7.533	1.339	3.791	1.133375
37	12.65	179.851	8.523	1.472	1.347	1.133375
38	54.77	779.719	3.472	1.284	1.894	1.133375
39	61.59	875.931	4.361	1.112	1.375	1.133375
40	38.99	554.584	6.948	1.576	1.737	1.133375
41	64.87	922.579	4.974	1.193	1.856	1.133375
42	43.39	573.133	6.253	1.225	1.883	1.133375
43	57.19	954.195	5.157	3.947	1.131	1.133375
44	86.99	1237.188	3.538	1.633	1.715	1.133375
45	87.32	1241.853	4.573	1.765	1.329	1.133375
46	41.84	595.311	5.515	1.659	1.659	1.133375
47	22.33	317.291	9.868	1.616	7.677	1.133375
48	34.84	495.197	6.156	1.379	1.797	1.133375
49	72.61	1117.979	1.174	1.732	1.454	1.133375
50	85.23	1211.791	1.751	3.841	1.328	1.133375

AVERAGE

	NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	38.83	552.223	55555555	55555555	1.639	55555555
SE	16.86	524.331	55555555	55555555	1.531	55555555
	5.21	74.147	55555555	55555555	1.171	55555555

ORIGINAL PAGE IS
 OF POOR QUALITY

DATE 12/29/78
 MOBILE FIELD NO. 100-11 5-742 1981
 DISLOCATION TYPE 1001
 MEASUREMENT ALONG THE DISLOCATION LINE IN 1000 FT. SAMPLES
 AVERAGE DISLOCATION DENSITY 210000 5.01 PP

MAG-511.3 INITS-PICTURE CAL. FACTOR= 1.375111 INITS/PP
 FRAME AREA= 3.515525111 14

FIELD NO.	NO./AREA	MEAN	STDEV	CV	SECTA
1	662.87	3.319	113.294	3.334	3.715
2	2289.32	3.365	38.172	34.153	3.745
3	5.79	3.333	2929.588	245.419	3.771
4	99.23	3.333	674.463	618.766	3.373
5	771.86	3.322	45.189	45.195	3.325
6	1152.69	3.333	48.433	51.137	3.334
7	4543.48	3.333	15.397	15.342	3.137
8	1458.88	3.341	55.245	34.617	3.334
9	4733.14	3.335	13.729	14.585	3.115
10	11792.22	3.335	9.473	9.869	3.186
11	8273.35	3.235	12.616	12.814	3.122
12	8145.71	3.232	9.922	9.793	3.142
13	7895.31	3.225	11.787	13.465	3.149
14	13153.29	3.374	7.673	7.873	3.215
15	9271.86	3.264	13.147	9.775	3.163
16	7946.51	3.226	13.892	11.187	3.145
17	4084.23	3.116	16.552	18.381	3.195
18	1645.51	3.347	33.533	25.399	3.348
19	1473.45	3.342	34.316	35.636	3.346
20	4275.84	3.122	17.335	16.356	3.195
21	4826.75	3.137	13.742	14.142	3.116
22	3831.81	3.138	16.384	16.974	3.399
23	3294.79	3.391	19.651	16.114	3.393
24	5582.24	3.152	16.296	15.866	3.131
25	2915.77	3.183	25.316	23.421	3.365

NO.	NO./AREA	MEAN	STDEV	CV	SECTA
SD	4564.88	3.133	168.436	35.785	3.791
SE	3571.82	3.132	578.149	121.076	3.757
SE	714.36	3.323	115.633	24.395	3.311

26	5332.79	3.142	16.886	17.315	3.397
27	2547.73	3.172	26.173	3.692	3.368
28	613.59	3.317	18.531	64.321	3.317
29	51.88	3.312	928.218	177.994	3.333
30	172.46	3.335	633.962	311.662	3.334
31	191.42	3.335	351.124	315.375	3.336
32	1278.84	3.336	49.923	46.758	3.335
33	2263.27	3.364	11.229	1.986	3.366
34	682.34	3.325	78.649	45.333	3.331
35	1832.23	3.351	33.151	32.339	3.353
36	267.27	3.338	213.232	172.922	3.338
37	538.74	3.315	126.655	74.582	3.317
38	545.51	3.316	127.725	73.325	3.325
39	731.23	3.323	74.584	73.333	3.322
40	441.52	3.313	464.179	136.213	3.315
41	165.87	3.335	318.578	255.978	3.336
42	75.45	3.332	651.142	721.154	3.332
43	572.85	3.316	93.191	82.372	3.319
44	511.45	3.315	135.219	5.416	3.318
45	973.65	3.338	59.988	7.763	3.339
46	675.85	3.319	93.197	62.386	3.323
47	875.75	3.325	13.822	17.713	3.324
48	513.17	3.315	153.437	75.52	3.316
49	933.3	3.326	73.472	46.34	3.331
50	361.48	3.313	132.142	3.435	3.313

NO.	NO./AREA	MEAN	STDEV	CV	SECTA
SD	2743.94	3.378	158.13	9.473	3.355
SE	3331.37	3.381	419.13	119.22	3.54
SE	452.73	3.313	62.384	19.731	3.378

347/82/21-2360

DATE 12/20/78
 MODEL PYSI 541 JPL 144-11 1-742 1981
 DISLOCATION PITS ONLY
 31 MM JEP 31-6
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 4.1 10

MAG-800.1 INITI-MIDTOWS CAL. FACTOR- 1.175333 INIT5/23
 FRAME AREA- 3.51552510 34

FIELD NO.	NO./AREA	MFPV	FRPH	L/A	AREA
1	158.63	3.115	281.532	376.149	1.133179
2	974.83	3.125	71.131	73.977	2.546992
3	916.29	3.126	68.381	67.156	1.978795
4	743.87	3.121	79.449	67.156	1.599341
5	1114.87	3.129	61.922	70.543	1.775126
6	678.43	3.119	95.371	71.949	1.766667
7	313.29	3.139	171.733	152.139	1.351335
8	793.23	3.122	71.147	55.519	1.439477
9	1494.83	3.143	39.226	14.779	1.649971
10	851.47	3.124	57.137	19.498	1.333324
11	1317.23	3.138	52.354	18.834	2.186555
12	3484.33	3.139	19.758	11.584	2.755554
13	1214.67	3.135	46.273	49.164	1.725831
14	1159.47	3.131	51.713	51.118	1.558149
15	1427.27	3.141	38.478	18.874	1.623786
16	4288.23	3.122	27.531	18.788	1.471465
17	1216.48	3.135	49.498	51.756	2.132871
18	2175.83	3.162	28.263	28.358	2.748915
19	1876.23	3.131	53.787	51.433	1.544202
20	1549.23	3.144	34.467	31.013	1.458238
21	1354.83	3.133	115.172	31.391	3.726916
22	1141.34	3.132	63.358	39.424	2.139375
23	1889.23	3.131	53.297	51.767	1.598879
24	791.69	3.122	112.419	79.248	2.738377
25	591.43	3.114	111.778	91.174	1.375729

AVERAGE

NO.	NO./AREA	MFPV	FRPH	L/A	AREA
SD	1253.46	3.136	73.768	62.347	1.972372
SE	882.29	3.125	54.198	51.191	1.763184
SE	176.46	3.135	13.843	13.118	1.152377

26	875.31	3.125	72.338	51.879	1.695574
27	8751.33	3.149	11.158	11.912	1.396709
28	6472.67	3.153	12.194	11.912	3.933489
29	2436.81	3.149	24.815	24.371	2.534578
30	6728.47	3.191	11.499	11.831	1.996123
31	2538.43	3.172	21.430	21.858	1.579487
32	423.34	3.112	129.132	121.595	1.479711
33	591.67	3.117	71.595	66.154	1.918678
34	27.11	3.113	511.132	71.194	1.896631
35	551.43	3.119	123.691	75.123	2.147402
36	377.61	3.118	441.141	211.232	1.498747
37	51.69	3.132	734.887	51.471	1.941576
38	91.83	3.133	612.745	629.195	1.792969
39	253.47	3.137	432.328	157.828	2.161733
40	734.47	3.121	95.375	1.537	1.763372
41	462.134	3.131	15.279	15.842	2.216751
42	2181.23	3.162	25.418	27.356	1.931233
43	9246.41	3.164	13.116	6.153	1.399113
44	2117.11	3.163	25.341	23.837	1.411251
45	3211.23	3.191	1.152	19.491	1.744174
46	103.64	3.111	113.913	91.931	1.325517
47	961.21	3.127	45.369	51.848	1.292344
48	2486.41	3.171	24.574	25.448	1.142436
49	1725.47	3.149	13.516	14.684	1.784743
50	631.41	3.118	78.386	73.114	1.261237

AVERAGE

NO.	NO./AREA	MFPV	FRPH	L/A	AREA
SD	1798.32	3.151	139.882	88.235	1.129945
SE	2163.92	3.158	151.174	118.25	1.126194
SE	291.88	3.115	21.834	19.134	1.159254

MODEL 833-1 INITS-MM CAL. FACTOR-
 FRAME AREA-
 1.133375 INITS/PS
 1.479313
 1PM DIPPED DIVISION BY 111
 .31 MM DIA. SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE CHN AREA = 19.847111

MAG-833-1 INITS-MM CAL. FACTOR-
 FRAME AREA-

1.133375 INITS/PS

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	16.13	329.252	13.417	2.641	3.421	1.333375
2	43.11	611.498	3.476	1.411	1.847	1.333375
3	23.19	329.818	5.468	1.775	2.654	1.333375
4	13.86	154.424	11.719	3.178	1.352	1.333375
5	15.48	223.197	8.152	2.373	1.469	1.333375
6	26.74	389.349	7.813	2.131	1.517	1.333375
7	8.91	125.789	9.868	3.676	3.325	1.333375
8	15.18	215.977	6.253	2.259	1.573	1.333375
9	13.81	194.366	7.212	3.289	1.357	1.333375
10	3.33	1.713	55555555	55555555	1.713	55555555
11	25.84	347.471	7.212	1.629	1.673	1.333375
12	113.34	1611.915	1.537	1.117	1.819	1.333375
13	23.34	332.231	1.934	1.119	1.741	1.333375
14	32.27	458.981	4.688	1.172	1.965	1.333375
15	35.69	537.596	5.348	1.856	1.614	1.333375
16	39.91	567.659	4.167	1.419	1.932	1.333375
17	57.34	815.493	4.167	1.332	1.917	1.333375
18	44.13	627.227	5.682	1.633	1.731	1.333375
19	58.61	833.611	3.696	1.314	1.788	1.333375
20	64.31	913.337	3.753	3.936	1.221	1.333375
21	69.37	985.642	5.168	1.784	1.375	1.333375
22	47.99	652.514	1.261	1.096	1.929	1.333375
23	83.86	1153.074	3.753	3.936	1.211	1.333375
24	56.88	837.414	3.472	1.338	1.788	1.333375
25	43.21	571.939	3.233	1.225	1.963	1.333375

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	38.67	548.985	55555555	55555555	1.731	55555555
SE	25.54	364.679	55555555	55555555	1.375	55555555
SE	5.13	72.922	55555555	55555555	1.361	55555555

26	19.27	274.754	13.417	2.467	1.443	1.333375
27	29.66	421.835	1.234	1.111	1.837	1.333375
28	55.49	948.466	3.636	1.858	1.283	1.333375
29	117.93	1676.735	5.515	1.349	1.835	1.333375
30	86.96	1236.819	4.464	1.931	1.233	1.333375
31	7.94	112.958	14.423	2.717	1.365	1.333375
32	132.61	1885.979	3.538	1.674	1.749	1.333375
33	119.33	1696.753	2.799	1.753	1.177	1.333375
34	45.98	653.917	2.679	1.993	1.137	1.333375
35	34.35	484.242	1.538	1.178	1.343	1.333375
36	79.93	1136.729	2.841	1.772	1.435	1.333375
37	13.86	154.424	9.175	3.289	1.363	1.333375
38	93.53	1329.759	5.348	1.442	1.752	1.333375
39	139.48	1557.135	5.357	1.133	1.992	1.333375
40	133.65	1913.634	3.175	1.633	1.773	1.333375
41	147.55	2198.141	7.511	1.177	1.544	1.333375
42	81.43	1143.878	1.937	1.656	1.629	1.333375
43	83.85	1192.493	4.341	1.319	1.175	1.333375
44	117.41	1527.554	1.676	1.756	1.441	1.333375
45	55.13	784.133	1.688	1.093	1.192	1.333375
46	45.55	652.321	2.523	1.736	1.624	1.333375
47	47.45	674.889	2.523	2.236	1.512	1.333375
48	35.35	515.193	4.466	1.995	1.479	1.333375
49	33.53	433.721	5.357	1.258	1.867	1.333375
50	3.13	1.133	55555555	55555555	1.133	55555555

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	53.75	764.416	55555555	55555555	1.519	55555555
SE	18.25	514.111	55555555	55555555	1.344	55555555
SE	5.41	76.938	55555555	55555555	1.151	55555555

DATE 12/25/78
 MODEL 1500 7 H JPL 114-31 -741 1250. 1
 DISLOCATION PITS ONLY
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 0.26 12

ORIGINAL PAGE IS
 OF POOR QUALITY

MAG-833.7 INITS-MICRONS CAL. FACTOR-
 FRAME AREA- 3.515525111 34

1.375111 INITS/22

FIELD	NO.	NO./AREA	MPV	MPH	L/A	FEPA
1	819.14	3.123	71.940	47.497	1.111	1.14637
2	818.23	3.114	71.054	46.254	1.111	1.487172
3	465.87	3.113	97.453	46.468	1.123	1.448713
4	643.19	3.118	71.915	45.554	1.133	1.344861
5	729.71	3.121	82.091	46.395	1.122	1.168773
6	2032.76	3.158	24.947	23.444	1.149	1.023223
7	1830.72	3.152	33.041	28.451	1.155	1.176948
8	2235.86	3.164	21.552	21.467	1.177	1.733813
9	994.37	3.128	41.871	45.776	1.119	1.268455
11	317.41	3.139	125.673	131.857	1.113	1.147274
11	34.37	3.171	725.744	878.193	1.112	1.785156
12	1187.71	3.134	41.593	45.191	1.145	1.696274
13	675.93	3.119	64.834	57.738	1.126	1.378355
14	1124.91	3.118	35.271	46.394	1.147	1.659293
15	921.65	3.126	7.129	15.719	1.141	1.354153
16	425.96	3.112	132.571	95.171	1.114	1.613942
17	948.12	3.127	13.189	4.395	1.125	1.536729
18	491.33	3.114	169.837	111.932	1.117	1.472183
19	244.71	3.137	151.911	243.536	1.139	1.639482
20	417.92	3.112	128.425	47.659	1.117	1.945711
21	874.74	3.125	53.174	12.474	1.132	1.544875
22	658.87	3.119	113.135	57.134	1.125	1.525363
23	451.39	3.113	136.172	83.131	1.118	1.439276
24	372.73	3.111	111.142	99.627	1.115	1.181257
25	541.81	3.115	81.451	64.655	1.124	1.151736

AVERAGE

	NO.	NO./AREA	MPV	MPH	L/A	FEPA
	819.11	3.123	176.976	7.956	1.111	1.749597
SD	536.42	1.115	133.114	51.255	1.118	1.575455
SE	117.23	1.113	5.523	7.251	1.114	1.15141

26	1112.77	1.122	41.427	5.449	1.143	1.107554
27	224.45	3.125	185.444	163.113	1.117	1.373492
28	74.57	3.112	538.793	78.114	1.113	1.359537
29	224.36	3.116	212.156	97.931	1.117	1.398793
30	563.48	3.116	68.133	8.381	1.125	1.123536
31	49.12	3.111	1171.75	2019.688	1.112	1.164153
32	115.55	1.115	514.131	45.015	1.118	1.153145
33	3373.72	3.136	17.448	13.119	1.116	1.455844
34	1939.39	3.154	35.183	19.178	1.176	1.475892
35	211.51	3.116	182.339	161.382	1.111	1.759195
36	1225.63	3.135	13.122	11.353	1.151	1.275213
37	27.47	3.111	1217.532	174.793	1.132	1.733743
38	43.86	3.111	946.973	931.442	1.132	1.891479
39	98.12	3.133	555555333	555555333	1.101	1.555555333
40	11.77	3.133	2533.784	533.784	1.131	1.744394
41	13.41	3.133	5859.375	4687.579	1.133	1.715625
42	795.73	3.123	69.393	72.162	1.124	1.927411
43	2.35	3.117	15425.131	8757.337	1.117	1.943757
44	212.83	3.116	213.968	188.153	1.138	1.234925
45	1294.88	3.137	42.268	39.134	1.141	1.251187
46	886.69	3.125	52.258	1.133	1.131	1.739732
47	2775.6	1.119	19.101	12.154	1.104	1.181411
48	1113.55	3.129	49.138	9.456	1.133	1.77802
49	2911.39	3.133	16.142	16.787	1.132	1.745211
50	7873.55	3.124	11.264	11.139	1.142	1.874147

AVERAGE

	NO.	NO./AREA	MPV	MPH	L/A	FEPA
	949.78	3.127	555555333	555555333	1.131	1.555555333
SD	1259.13	3.114	555555333	555555333	1.131	1.555555333
SE	178.35	3.115	555555333	555555333	1.131	1.555555333

DATE 12/28/78
 MODEL FVCO 442 JPL 104-13 1-742 100
 PRINT ONLY
 DATA INPUT DIVIDED BY 100
 .31 MM SPOT SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE PIN AREA = 29.67X107

MAG-800.1 UNITS-MM CAL. FACTOR- 1.111375 UNITS/IN
 FRAME AREA- 3.073313

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	21.73	298.533	6.696	2.155	1.541	1.079313
2	4.55	64.712	31.251	4.246	3.168	1.111114
3	1.11	3.113	555555555	555555555	1.131	555555555
4	3.21	45.548	23.438	18.751	1.193	1.111114
5	3.74	10.545	187.133	1.251	1.135	1.111113
6	3.07	1.113	555555555	555555555	1.131	555555555
7	5.53	83.351	18.751	7.113	1.111	1.111114
8	1.65	23.488	44.875	14.786	1.148	1.111117
9	34.14	485.578	3.753	1.349	1.853	1.111114
10	51.26	729.997	4.354	1.488	1.771	1.111115
11	29.69	122.415	7.112	1.414	1.443	1.111112
12	70.11	1129.41	3.675	1.977	1.117	1.111116
13	15.11	443.117	4.343	1.517	1.733	1.111113
14	32.51	748.247	3.676	1.157	1.995	1.111114
15	42.97	611.157	1.361	1.132	1.835	1.111114
16	24.17	343.592	6.157	1.786	1.627	1.111111
17	63.27	898.775	1.675	1.133	1.776	1.111114
18	33.73	469.743	5.218	1.633	1.712	1.111113
19	56.62	835.333	1.233	1.109	1.118	1.111114
20	32.93	553.643	4.444	1.114	1.160	1.111117
21	33.76	337.941	5.218	1.136	1.633	1.111117
22	36.56	548.373	4.818	1.974	1.627	1.111112
23	45.14	441.366	3.131	1.178	1.372	1.111111
24	62.12	851.998	1.568	1.873	1.311	1.111112
25	44.99	639.928	4.838	1.276	1.956	1.111113
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	11.19	415.496	555555555	555555555	1.421	555555555
SE	22.7	321.941	555555555	555555555	1.493	555555555
SE	4.51	64.188	555555555	555555555	1.179	555555555
26	11.11	575.215	3.753	1.431	1.733	1.111113
27	44.69	635.610	1.125	1.197	1.951	1.111111
28	110.39	1841.313	5.582	1.135	1.667	1.111116
29	134.55	1914.191	4.444	1.633	1.731	1.111114
30	64.75	1233.839	3.796	1.165	1.193	1.111113
31	28.75	478.883	1.929	2.161	1.517	1.111111
32	91.8	1376.711	5.218	1.485	1.743	1.111112
33	45.92	652.871	5.682	1.131	1.235	1.111111
34	33.11	155.751	5.157	1.155	1.211	1.111117
35	81.60	1175.152	3.75	1.957	1.157	1.111111
36	53.21	1212.168	5.218	1.137	1.733	1.111114
37	57.47	816.128	3.148	1.957	1.149	1.111113
38	112.47	1598.422	3.289	1.333	1.165	1.111116
39	139.43	1983.358	3.916	1.213	1.615	1.111117
40	96.56	1373.129	2.679	1.679	1.627	1.111112
41	99.22	1411.197	3.772	1.738	1.448	1.111119
42	118.37	1579.193	5.157	1.333	1.277	1.111112
43	91.91	1317.172	4.818	1.938	1.131	1.111116
44	11.76	167.192	18.753	1.357	1.213	1.111114
45	3.33	1.113	555555555	555555555	1.117	555555555
46	3.33	1.113	555555555	555555555	1.111	555555555
47	2.63	19.786	15.875	1.138	1.151	1.111114
48	3.11	1.117	555555555	555555555	1.117	555555555
49	3.76	39.316	62.511	15.25	1.772	1.111114
50	1.45	20.412	21.138	9.248	1.197	1.111111
AVERAGE						
	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	46.79	665.411	555555555	555555555	1.466	555555555
SE	19.67	164.198	555555555	555555555	1.435	555555555
SE	5.51	79.791	555555555	555555555	1.162	555555555

DATE 12/1/78
 MODEL 1900 # 12 JPL 14-11 4-741 100.
 DISLOCATION PITS ONLY .01 MM DIA
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PITS AREA = 1.100

MAG-800.1 INITS-MICROING CAL. FACTOR- 1.375113 WITS/777
 FRAME AREA- 3.515625000 14

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	1251.23	7.115	46.124	14.594	1.499722
2	917.51	7.126	47.492	59.187	1.324767
3	869.17	7.125	57.167	59.675	1.341557
4	1847.27	7.153	13.798	12.264	1.859171
5	542.27	7.115	97.587	97.492	1.323777
6	824.27	7.123	57.234	57.667	1.189977
7	928.81	7.126	57.741	57.761	1.313471
8	757.41	7.122	64.774	69.547	1.341429
9	1325.43	7.138	48.192	45.911	1.945567
10	877.43	7.125	64.389	69.867	1.778925
11	1245.67	7.135	52.326	45.956	1.773479
12	179.69	7.133	347.222	138.448	1.846841
13	645.69	7.117	137.761	12.316	1.476573
14	1313.67	7.129	62.962	58.194	1.869942
15	829.67	7.123	99.322	47.493	1.622456
16	1377.40	7.131	49.761	44.728	1.795115
17	1234.41	7.135	12.625	11.148	1.827158
18	329.41	7.139	149.522	159.983	1.447559
19	155.41	7.174	397.625	198.936	2.171262
20	585.21	7.117	278.333	117.947	1.898438
21	452.41	7.113	165.344	75.331	1.972870
22	3234.31	7.122	27.153	18.535	1.777771
23	543.31	7.115	157.966	177.477	1.634710
24	794.97	7.123	133.738	79.991	1.171567
25	569.94	7.116	92.274	99.417	1.538762

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	915.88	7.126	177.257	88.769	1.728	2.751593
SE	697.35	7.117	97.236	58.466	1.717	1.977649
SE	121.47	7.133	18.747	17.697	1.773	1.157137

26	137.47	7.114	361.969	318.273	1.775	1.995987
27	519.67	7.114	123.518	115.693	1.715	1.819845
28	1.77	7.137	555555555	555555555	1.773	55555555555
29	56.87	7.112	822.368	757.824	1.772	1.170375
30	377.27	7.111	169.537	167.112	1.717	1.699125
31	561.17	7.117	97.331	97.355	1.715	1.725550
32	51.27	7.111	852.173	968.156	1.772	1.726571
33	947.17	7.127	58.594	57.757	1.737	1.674718
34	874.67	7.125	71.323	55.977	1.722	1.676171
35	273.27	7.138	347.919	348.716	1.776	1.997748
36	313.87	7.119	227.747	157.828	1.779	1.891573
37	701.17	7.127	64.477	61.523	1.720	1.614151
38	571.17	7.114	119.795	115.296	1.771	1.677321
39	22.27	7.111	1934.125	1413.746	1.771	1.777701
40	221.27	7.116	551.471	243.576	1.775	1.774424
41	62.77	7.132	756.348	762.195	1.772	1.147274
42	118.67	7.133	357.824	355.114	1.776	1.191295
43	319.67	7.119	112.577	141.616	1.712	1.159344
44	4516.17	7.128	14.157	14.132	1.716	2.566945
45	2488.67	7.171	23.787	23.114	1.777	1.977172
46	1798.17	7.151	17.337	19.687	1.756	1.594227
47	1497.27	7.143	35.674	35.179	1.745	1.554217
48	1231.67	7.134	47.311	46.557	1.742	1.611177
49	779.27	7.121	79.147	75.331	1.722	1.642108
50	1181.47	7.134	32.536	46.755	1.741	1.702565

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	846.78	7.124	555555555	555555555	1.726	55555555555
SD	815.39	7.123	555555555	555555555	1.722	55555555555
SE	115.31	7.137	555555555	555555555	1.777	55555555555

DATE 12/29/79
 MAIL PYD 743 PDL 140-1494-742 SPCT.
 PRINTS ONLY
 ITEM DUMPED 01/11/80 BY JJJ
 1.41 MM SPCT 1100
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE JAGGLE
 AVERAGE RAIN AREA = 11.111111

MAG-841.1 INITIS-4M CAL. PACE 14- 1.111175 INITIS/20
 FRAME 1127- 1.111111

FIELD	NO.	NJ./A/223	MP20	MP24	L/1	FEPA
1	86.82	1234.747	5.859	1.187	1.923	1.111127
2	66.33	943.417	5.859	1.445	1.485	1.111124
3	93.48	1129.552	2.373	1.871	1.414	1.111122
4	119.12	1494.148	2.467	1.944	1.224	1.111127
5	115.91	1648.485	3.348	1.442	1.848	1.111140
6	93.19	1124.941	4.810	1.431	1.770	1.111134
7	79.19	1124.848	3.233	1.897	1.251	1.111117
8	26.58	177.964	8.523	2.314	1.519	1.111112
9	22.74	323.663	11.417	3.324	1.413	1.111112
10	46.18	941.253	5.515	1.363	1.887	1.111115
11	54.73	721.455	9.648	2.983	1.525	1.111121
12	63.19	854.524	1.233	1.710	1.705	1.111115
13	12.31	174.974	8.152	1.614	1.125	1.111111
14	4.45	43.354	21.833	7.212	1.157	1.111114
15	29.39	416.347	4.444	1.752	1.435	1.111119
16	92.82	1321.181	4.454	1.143	1.973	1.111125
17	115.54	1443.113	7.813	1.103	1.519	1.111154
18	131.94	1449.835	4.573	1.478	1.410	1.111128
19	53.67	743.240	5.859	1.340	1.833	1.111113
20	52.17	1171.111	4.814	1.480	1.544	1.111111
21	12.53	154.142	4.814	1.480	1.544	1.111114

AVERAGE

	NJ.	NJ./A/223	MP20	MP24	L/1	FEPA
SD	55.91	951.679	6.313	1.775	1.831	1.111121
SE	14.54	491.583	3.944	1.421	1.377	1.111113
	7.54	137.272	3.851	1.313	1.182	1.111113

22	33.52	476.461	4.348	2.131	1.541	1.111111
23	19.31	271.222	4.348	2.155	1.512	1.111113
24	28.11	390.222	3.348	1.553	1.784	1.111113
25	11.21	320.484	11.417	2.974	1.387	1.111121
26	29.24	415.892	7.212	1.747	1.410	1.111119
27	27.15	184.155	5.148	2.250	1.525	1.111113
28	7.47	119.377	9.152	4.168	1.251	1.111114
29	15.11	512.100	3.530	1.153	1.156	1.111111
30	27.47	1247.120	4.483	1.430	1.935	1.111124
31	122.13	1735.522	4.431	1.064	1.570	1.111123
32	40.18	993.842	3.436	1.431	1.780	1.111122
33	42.73	447.477	4.148	1.224	1.401	1.111111
34	78.45	1115.798	4.458	1.413	1.781	1.111124
35	31.15	428.222	4.148	1.551	1.603	1.111118
36	14.79	211.315	9.929	2.338	1.514	1.111135
37	7.54	119.414	11.417	5.238	1.267	1.111114
38	13.48	191.745	9.868	2.717	1.411	1.111116
39	11.73	195.232	11.393	1.178	1.340	1.111117
40	9.52	135.127	17.345	4.944	1.174	1.111115
41	1.33	14.453	62.531	31.251	1.147	1.111115
42	13.27	189.742	11.119	3.324	1.360	1.111117
43	25.15	113.587	5.515	1.24	1.731	1.111112
44	11.18	211.427	11.423	3.614	1.112	1.111110
45	4.82	40.123	16.786	7.212	1.157	1.111117
46	1.32	1.111	555555555	555555555	1.111	555555555555
47	14.41	231.865	11.129	3.289	1.333	1.111118
48	32.44	464.142	6.251	1.431	1.401	1.111113
49	22.52	323.214	9.868	1.138	1.533	1.111118
50	39.94	568.127	2.531	1.402	1.174	1.111111

AVERAGE

	NJ.	NJ./A/223	MP20	MP24	L/1	FEPA
SD	45.97	648.159	555555555	555555555	7.439	555555555555
SE	15.52	545.162	555555555	555555555	1.355	555555555555
	5.32	71.441	555555555	555555555	1.151	555555555555

DATE 12/19/78

MAIL FROM VAX JPL 134-111-141 1201.0

DISLOCATION PITS ONLY

31 BY 100 51-0

MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE

AVERAGE DISLOCATION PIT AREA = 0.1622

MAG=831.1 INITS=MICRONS CAL. FACTOR=

1.176111 INITS/22

FRAME AREA= 3.515625113 14

FIELD	NO.	NO./AREA	MPV	MPH	L/A	AREA
1	345.54	3.111	265.115	91.495	3.114	0.776635
2	318.91	3.119	289.452	119.712	3.115	0.661255
3	42.00	3.112	55555555	55555555	3.111	0.55555555
4	15.41	3.111	2413.845	1349.114	3.111	1.335010
5	5.42	3.113	11416.457	11416.47	3.113	2.110163
6	45.12	3.111	919.110	114.505	3.111	0.611345
7	451.35	3.111	195.541	141.831	3.110	0.179241
8	2562.41	3.173	24.784	27.253	3.161	0.864972
9	915.43	3.126	47.110	7.111	3.125	0.471712
10	13.14	3.110	1199.250	1442.110	3.111	1.145190
11	559.77	3.110	91.454	59.122	3.121	0.215431
12	9.49	3.111	3216.251	3212.740	3.111	1.078916
13	2691.51	3.177	25.418	29.187	3.163	0.443216
14	8452.91	3.241	11.198	11.271	3.157	6.132716
15	348.45	3.115	111.714	27.153	3.114	1.745477
16	188.57	3.115	474.461	129.132	3.117	0.994719
17	1.75	3.111	45875.111	45875.111	3.111	1.562511
18	1.76	3.111	1125.111	55555555	3.111	0.55555555
19	28.88	3.111	1444.717	1336.095	3.111	1.147656
20	1.11	3.111	55555555	55555555	3.111	0.55555555
21	557.75	3.116	93.554	84.485	3.110	1.477176
22	314.71	3.119	218.797	151.666	3.111	1.055973
23	4452.98	3.127	19.318	18.232	3.180	0.984153
24	3349.57	3.194	21.108	17.639	3.192	3.131662
25	3351.78	3.195	23.114	22.114	3.174	3.519523

AVERAGE

	NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	1171.87	3.133	55555555	55555555	3.126	0.55555555
SE	1957.49	3.155	55555555	55555555	3.110	0.55555555
SE	391.51	3.111	55555555	55555555	3.119	0.55555555

26	2415.71	3.160	29.127	27.995	3.150	0.142515
27	5231.19	3.148	15.137	15.136	3.115	0.226111
28	3451.10	3.190	23.457	19.174	3.170	0.197459
29	8481.11	3.241	11.259	11.819	3.147	0.112512
30	1581.21	3.145	61.819	42.433	3.132	0.197147
31	71.16	3.112	425.111	419.744	3.112	1.131251
32	84.43	3.112	561.377	523.743	3.113	1.270074
33	849.41	3.124	64.442	75.435	3.123	2.225632
34	698.64	3.121	73.414	45.174	3.127	1.714913
35	444.91	3.118	142.261	117.188	3.112	0.513522
36	487.41	3.121	82.453	79.923	3.121	1.013977
37	589.34	3.117	74.971	72.161	3.121	1.343546
38	3715.71	3.116	22.671	12.429	3.179	0.516253
39	1788.95	3.151	35.823	34.445	3.147	2.417376
40	3454.53	3.199	21.194	21.212	3.160	1.077353
41	1659.11	3.147	41.382	33.466	3.117	0.271274
42	5426.16	3.143	12.572	13.117	3.121	0.214557
43	2484.15	3.124	24.159	24.478	3.145	0.980361
44	2272.87	3.155	24.872	28.177	3.161	0.641191
45	1313.29	3.137	41.871	41.467	3.141	1.743372
46	1842.45	3.152	31.291	31.418	3.153	1.038774
47	1497.174	3.126	4.717	1.779	3.156	16.760115
48	211.16	3.111	91.664	75.111	3.117	0.715411
49	333.52	3.111	95.458	111.114	3.117	1.141111
50	555.52	3.116	84.412	89.494	3.123	1.293210

AVERAGE

	NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	1914.34	3.154	55555555	55555555	3.141	0.55555555
SE	2744.71	3.179	55555555	55555555	3.145	0.55555555
SE	388.16	3.111	55555555	55555555	3.114	0.55555555

DATE 12/29/78
 M31L (Y3) 7-14 JPL 144-3375-742 5322. F
 TWINS ONLY
 QTM DIF JF 011/02 BY 111
 3.31 MM STEP SIZE
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE TWIN AREA = 27.13X113

ORIGINAL PAGE IS
 OF POOR QUALITY

MAG-830.0 INIPS-MM CAL. FACTOR- 3.33375 INIPS/225
 FRAME AREA- 3.171113

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	1.43	1.111	555555555	555555555	1.111	5555555555
2	2.13	29.881	62.533	23.833	1.153	3.111174
3	1.13	14.472	93.753	37.543	1.137	3.111174
4	1.53	40.411	44.875	17.145	1.160	1.111137
5	1.73	24.111	31.231	16.875	1.150	1.111133
6	9.55	135.774	9.868	4.351	1.177	1.111139
7	14.19	271.827	6.349	3.476	1.141	1.111137
8	12.53	178.235	26.786	5.850	1.184	1.111117
9	17.99	255.822	7.131	1.989	1.121	1.111137
10	11.35	141.441	14.421	5.515	1.113	1.111130
11	2.95	41.239	37.511	1.138	1.150	1.111116
12	34.32	428.153	8.939	1.233	1.155	1.111122
13	139.69	1567.193	4.176	1.160	1.160	1.111161
14	13.17	144.685	9.133	3.174	1.123	1.111116
15	9.51	135.351	13.417	4.261	1.291	1.111139
16	17.13	242.192	5.944	1.724	1.115	1.111116
17	8.81	125.294	13.394	1.351	1.241	1.111137
18	24.83	381.113	7.212	1.144	1.100	1.111115
19	24.88	353.852	5.239	1.995	1.597	1.111124
20	4.28	43.811	33.439	11.129	1.115	1.111137
21	18.61	257.355	5.850	2.155	1.534	1.111131
22	11.15	157.257	9.375	3.689	1.312	1.111130
23	14.19	231.827	6.914	2.534	1.454	1.111139
24	1.55	22.117	62.533	23.439	1.153	1.111133
25	114.19	1454.535	4.573	1.856	1.248	1.111119

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	18.89	268.718	555555555	555555555	1.117	5555555555
SE	27.36	389.374	555555555	555555555	1.278	5555555555
SE	5.47	77.815	555555555	555555555	1.155	5555555555

26	84.37	1199.951	4.838	1.133	1.095	1.111117
27	24.17	372.211	1.682	1.913	1.587	1.111118
28	56.58	834.685	4.573	1.714	1.172	1.111111
29	14.24	231.183	9.929	1.431	1.739	1.111111
30	44.94	494.695	5.515	1.157	1.047	1.111117
31	75.27	1171.167	4.174	1.942	1.165	1.111122
32	58.98	838.761	1.696	1.293	1.810	1.111113
33	36.39	513.216	5.238	1.736	1.656	1.111111
34	15.55	231.223	7.212	2.373	1.477	1.111134
35	24.51	348.611	13.417	1.916	1.771	1.111119
36	15.96	226.989	11.129	2.155	1.597	1.111134
37	5.57	79.159	13.394	7.212	1.174	1.111137
38	15.59	221.747	4.573	2.825	1.457	1.111137
39	12.29	459.231	1.827	2.137	1.435	1.111121
40	89.31	1274.197	4.464	1.247	1.255	1.111123
41	65.79	935.741	5.859	1.113	1.965	1.111112
42	67.27	956.717	4.482	1.589	1.712	1.111115
43	58.83	836.563	4.496	1.714	1.551	1.111119
44	147.34	1526.319	7.813	1.633	1.461	1.111131
45	57.51	718.188	5.768	1.833	1.451	1.111115
46	4.39	58.189	16.875	15.625	1.381	1.111139
47	4.38	93.491	31.253	8.929	1.129	1.111138
48	3.99	42.462	62.533	13.833	1.159	1.111111
49	8.65	125.914	4.523	1.112	1.272	1.111137
50	21.19	295.733	6.944	2.757	1.437	1.111139

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	29.32	416.969	555555555	555555555	1.457	5555555555
SE	30.36	431.791	555555555	555555555	1.325	5555555555
SE	4.29	61.364	555555555	555555555	1.146	5555555555

DATE 12/29/78
 MOBIL TYCO 7 45 JUL 1944-1175-742 1981 B
 TWINS ONLY
 OUTPUT AREA OF ITEM DIVIDED BY 177
 3.31 MM DEEP SIZE
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE TANKER
 AVERAGE TWIN AREA = 31.13117

MAG-877.3 INITS-MM CAL. FACTOR:- 1.11375 INITS/22
 FRAME AREA- 1.171813

FIELD	NO.	NO./AREA	MEAN	MEAN	L/A	AREA
1	21.55	316.148	7.511	1.752	1.589	1.111177
2	119.03	1553.657	3.472	1.768	1.421	1.111117
3	61.39	873.171	4.934	1.524	1.744	1.111114
4	67.23	956.175	5.859	1.674	1.667	1.111126
5	13.81	196.429	17.345	7.577	1.141	1.111115
6	56.78	797.521	1.989	1.752	1.696	1.111119
7	36.82	531.454	6.251	1.589	1.696	1.111112
8	172.16	1451.495	5.482	1.574	1.677	1.111128
9	47.01	668.614	3.676	1.823	1.675	1.111133
10	58.21	837.741	4.694	1.638	1.613	1.111121
11	38.25	543.958	1.934	1.638	1.641	1.111127
12	122.81	1745.614	7.511	1.124	1.413	1.111187
13	98.17	1396.252	1.989	1.293	1.872	1.111133
14	65.77	949.555	3.676	1.359	1.953	1.111122
15	74.89	1363.834	3.178	1.694	1.552	1.111113
16	43.94	582.235	1.454	1.637	1.725	1.111111
17	3.29	46.746	26.786	14.423	1.188	1.111137
18	17.81	253.391	7.511	2.259	1.517	1.111125
19	5.17	115.158	21.813	1.15	1.215	1.111126
20	96.48	1375.111	1.717	1.188	1.832	1.111151
21	41.79	864.571	4.464	1.349	1.935	1.111114
22	97.88	1392.112	3.827	1.541	1.749	1.111132
23	57.33	814.992	4.167	1.455	1.773	1.111113
24	48.61	691.279	8.929	2.641	1.419	1.111123
25	23.64	336.195	19.417	2.287	1.461	1.111118

AVERAGE

	NO.	NO./AREA	MEAN	MEAN	L/A	AREA
SD	57.16	812.971	7.258	1.589	1.675	1.111121
SE	32.74	455.573	5.771	2.11	1.318	1.111117
	6.55	91.114	1.154	1.561	1.744	1.111133

26	61.74	864.109	4.934	1.157	1.940	1.111115
27	39.41	551.454	4.144	1.885	1.419	1.111119
28	45.12	641.711	4.157	1.459	1.817	1.111113
29	56.94	1222.407	2.315	1.513	1.803	1.111135
30	58.92	972.081	3.611	1.147	1.709	1.111121
31	59.24	1349.331	3.476	1.997	1.123	1.111122
32	65.39	645.477	3.827	1.465	1.791	1.111116
33	97.11	1379.725	3.72	1.897	1.216	1.111134
34	58.76	935.768	3.472	1.744	1.432	1.111119
35	6.51	92.548	15.625	5.482	1.213	1.111135
36	11.62	155.265	12.533	4.261	1.291	1.111117
37	15.93	226.177	9.375	1.976	1.374	1.111137
38	41.74	579.371	12.533	1.573	1.269	1.111135
39	18.33	251.646	3.989	1.749	1.711	1.111117
40	22.71	322.975	7.212	1.786	1.619	1.111113
41	31.97	454.714	6.152	1.574	1.645	1.111111
42	17.86	254.336	4.251	1.534	1.455	1.111118
43	87.62	1246.197	3.689	1.111	1.927	1.111134
44	12.32	175.181	11.329	3.174	1.157	1.111117
45	44.95	539.339	5.357	1.349	1.787	1.111112
46	31.38	432.351	6.148	1.563	1.714	1.111118
47	8.27	117.574	21.33	1.148	1.197	1.111110
48	41.14	571.872	7.213	1.414	1.647	1.111119
49	12.55	615.342	4.241	1.334	1.659	1.111113
50	13.44	219.556	11.329	1.125	1.351	1.111116

AVERAGE

	NO.	NO./AREA	MEAN	MEAN	L/A	AREA
SD	49.34	771.677	7.277	1.128	1.686	1.111118
SE	39.94	439.974	5.134	2.243	1.339	1.111114
	4.37	62.222	1.726	1.317	1.748	1.111112

DATE 12/19/78
 CIVIL ENG 7-45 JPL 144-3175-742 1255. 8
 DISLOCATION PITS ONLY
 7.31 MM STEP SIZE
 MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 1.4122

MAG-800.7 INITS-MICRONS CAL. FACTOR- 1.375311 INITS/22
 FRAME AREA- 3.515425311 14

FIELD NO.	NO./AREA	MPV	MPH	L/A	AREA
1	1.11	3.111	555555555	3.111	5555555555
2	1118.87	3.112	51.725	3.111	2.128248
3	418.29	3.112	148.817	3.113	3.251338
4	266.93	3.118	192.071	3.139	1.778125
5	26.46	3.131	1913.165	3.131	1.597757
6	321.31	3.139	175.234	3.139	1.597659
7	267.32	3.138	148.574	3.112	1.133465
8	951.75	3.127	73.542	3.133	2.566931
9	2152.53	3.158	31.838	3.151	1.149881
10	1197.86	3.111	58.581	3.111	1.195114
11	1.11	3.111	555555555	3.111	5555555555
12	16.34	3.111	937.507	3.111	1.476567
13	969.64	3.112	117.088	3.112	1.465768
14	15.56	3.111	278.733	3.111	1.811571
15	848.44	3.121	75.337	3.124	1.802762
16	7555.25	3.115	12.335	3.135	1.651482
17	3465.76	3.109	19.774	3.105	1.794531
18	4452.65	3.127	1.425	3.124	1.95643
19	95.63	3.113	27.217	3.111	1.64777
20	1.11	3.111	555555555	3.111	5555555555
21	51.75	3.111	755.148	3.112	1.330743
22	352.92	3.111	147.432	3.111	1.444754
23	599.81	3.117	93.415	3.127	1.477924
24	1312.45	3.117	41.645	3.144	1.659734
25	169.84	3.115	589.623	3.115	1.211674

AVERAGE

NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	1361.63	3.111	555555555	3.125	5555555555
SE	1718.43	3.149	555555555	3.112	5555555555
SE	341.69	3.111	555555555	3.116	5555555555

26	1159.46	3.111	51.979	3.111	1.797711
27	2322.37	3.156	10.119	3.161	1.899377
28	537.19	3.114	114.619	3.115	1.721031
29	379.57	3.111	281.532	3.115	1.458125
30	179.57	3.115	308.389	3.114	1.512461
31	3339.14	3.194	21.257	3.197	2.914377
32	752.14	3.121	145.837	3.127	1.723473
33	199.33	3.116	231.481	3.117	1.153875
34	5373.54	3.144	15.359	3.176	1.488647
35	5911.19	3.147	12.173	3.145	1.545211
36	7831.42	3.223	11.461	3.154	1.955118
37	4381.52	3.125	15.831	3.107	1.465316
38	4936.19	3.147	13.168	3.128	1.875357
39	941.36	3.126	66.114	3.133	1.329624
40	322.76	3.119	153.999	3.117	1.138334
41	3857.78	3.111	16.218	3.106	1.223447
42	71.23	3.142	928.212	3.113	1.411156
43	727.94	3.121	62.458	3.127	1.257214
44	278.44	3.118	148.817	3.111	1.731166
45	596.33	3.117	84.612	3.122	1.207327
46	787.74	3.122	62.251	3.129	1.137013
47	349.81	3.111	126.178	3.114	1.265752
48	597.25	3.117	71.821	3.128	1.244145
49	2278.29	3.165	26.297	3.161	1.177278
50	15767.79	3.449	7.137	3.233	1.7341994

AVERAGE

NO.	NO./AREA	MPV	MPH	L/A	AREA
SD	1781.49	3.151	555555555	3.142	5555555555
SE	2787.94	3.179	555555555	3.157	5555555555
SE	394.27	3.111	555555555	3.117	5555555555

DATE 12/19/79

MOJIL TACO #44 JPL 144-3395-742 SPSS P

DISLOCATION PIT

0.31 MM STEP SIZE

MEASUREMENTS TAKEN ALONG THE CENTER LINE OF THE SAMPLE

AVERAGE PIT AREA = 5.15PP

MAG-800J UNITS-MICRONS CAL. FACTOR-
FRAME AREA- 3.515625777 74

0.375333 UNITS/PP

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	3.11	3.111	555555555	555555555	3.111
2	1724.95	3.149	555555555	555555555	3.152
3	111.15	3.111	428.182	177.57	3.111
4	52.29	3.112	928.218	822.168	3.112
5	4662.29	3.133	16.262	17.876	3.898
6	2898.76	3.388	22.221	23.615	3.373
7	7296.19	3.218	15.134	13.315	3.115
8	2515.81	3.172	55.473	34.555	3.341
9	1676.38	3.148	37.623	34.748	3.148
10	2322.29	3.166	3.166	22.423	3.173
11	443.43	3.913	116.514	117.481	3.115
12	7.35	3.113	5259.375	5695.429	3.113
13	5.97	3.111	4914.211	3751.111	3.111
14	11.43	3.133	4464.286	3635.769	3.133
15	3.15	3.111	11718.753	15425.333	3.111
16	2336.11	3.357	35.947	31.314	3.343
17	2754.29	3.378	29.131	23.292	3.382
18	4751.48	3.135	14.521	14.594	3.113
19	3932.29	3.111	18.222	18.157	3.389
20	1692.57	3.148	38.612	39.725	3.142
21	2194.29	3.166	25.491	23.121	3.152
22	549.14	3.118	92.156	73.799	3.121
23	1726.86	3.149	38.917	34.422	3.345
24	3174.86	3.197	21.134	18.999	3.384
25	1.43	3.111	555555555	555555555	3.111

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1858.43	3.353	555555555	555555555	3.344	555555555
1841.11	3.152	555555555	555555555	3.118	555555555
348.22	3.111	555555555	555555555	3.115	555555555

26	251.11	3.118	217.871	147.638	3.111
27	124.57	3.114	115.723	255.849	3.114
28	2151.11	3.151	29.389	29.441	3.156
29	725.76	3.121	95.154	11.516	3.123
30	2177.71	3.159	12.161	10.574	3.154
31	456.11	3.114	111.111	17.378	3.114
32	2131.73	3.151	9.555	21.491	3.151
33	474.45	3.111	120.777	111.747	3.113
34	157.15	3.145	493.421	273.124	3.145
35	137.62	3.113	61.177	485.751	3.133
36	146.95	3.134	351.124	144.669	3.115
37	1626.29	3.145	14.483	11.267	3.157
38	3291.29	3.194	18.943	17.643	3.191
39	3151.14	3.193	19.913	18.724	3.195
40	4195.62	3.119	15.441	15.131	3.117
41	11353.21	3.195	9.355	9.652	3.189
42	3255.33	3.193	23.695	22.777	3.169
43	3254.57	3.193	23.666	11.753	3.179
44	2118.48	3.161	11.312	29.263	3.155
45	5623.33	3.161	14.775	14.779	3.121
46	2319.51	3.157	17.631	23.873	3.151
47	1320.11	3.143	19.557	13.116	3.143
48	1771.49	3.151	11.133	14.155	3.149
49	961.57	3.127	53.771	43.111	3.123
50	534.86	3.115	29.471	74.158	3.119

AVERAGE

NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1979.37	3.155	555555555	555555555	3.118	555555555
2332.68	3.158	555555555	555555555	3.141	555555555
287.46	3.112	555555555	555555555	3.116	555555555

DATE 12/16/78
 RUN SAMPLE # 1 JPL 4-457 1980 LA
 TWINS ONLY
 ITEM 117 DATA DIVIDED BY 111
 31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE AREA OF ONE TWIN = 21.76 X 111

MAG-PT10.1 INITS-MM CAL. FACTOR- 1.111175 DIVIDED BY
 POINT AREA- 1.111111

FIELD NO.	AREA	AREA	AREA	AREA	AREA	AREA
1	31.11	31.1177	3.175	3.670	1.316	1.111111
LAST FIELD DELETED						
1	10.11	117.111	1.111	1.111	1.111	1.111111
2	11.11	109.117	1.111	1.111	1.111	1.111111
3	11.11	101.111	1.111	1.111	1.111	1.111111
4	11.11	1149.111	1.111	1.111	1.111	1.111111
5	11.11	144.111	1.111	1.111	1.111	1.111111
6	11.11	1189.111	1.111	1.111	1.111	1.111111
7	11.11	109.111	1.111	1.111	1.111	1.111111
8	11.11	1186.111	1.111	1.111	1.111	1.111111
9	11.11	1189.111	1.111	1.111	1.111	1.111111
10	11.11	1189.111	1.111	1.111	1.111	1.111111
11	11.11	1189.111	1.111	1.111	1.111	1.111111
12	11.11	1115.111	1.111	1.111	1.111	1.111111
13	11.11	1115.111	1.111	1.111	1.111	1.111111
14	11.11	1115.111	1.111	1.111	1.111	1.111111
15	11.11	1115.111	1.111	1.111	1.111	1.111111
16	11.11	1115.111	1.111	1.111	1.111	1.111111
17	11.11	1115.111	1.111	1.111	1.111	1.111111
18	11.11	1115.111	1.111	1.111	1.111	1.111111
19	11.11	1115.111	1.111	1.111	1.111	1.111111
20	11.11	1115.111	1.111	1.111	1.111	1.111111
21	11.11	1115.111	1.111	1.111	1.111	1.111111
22	11.11	1115.111	1.111	1.111	1.111	1.111111
23	11.11	1115.111	1.111	1.111	1.111	1.111111
24	11.11	1115.111	1.111	1.111	1.111	1.111111
25	11.11	1115.111	1.111	1.111	1.111	1.111111
26	11.11	1115.111	1.111	1.111	1.111	1.111111
27	11.11	1115.111	1.111	1.111	1.111	1.111111
28	11.11	1115.111	1.111	1.111	1.111	1.111111
29	11.11	1115.111	1.111	1.111	1.111	1.111111
30	11.11	1115.111	1.111	1.111	1.111	1.111111
31	11.11	1115.111	1.111	1.111	1.111	1.111111
32	11.11	1115.111	1.111	1.111	1.111	1.111111
33	11.11	1115.111	1.111	1.111	1.111	1.111111
34	11.11	1115.111	1.111	1.111	1.111	1.111111
35	11.11	1115.111	1.111	1.111	1.111	1.111111
AVERAGE						
NO.	NO.	NO.	NO.	NO.	NO.	NO.
31	11.11	1115.111	1.111	1.111	1.111	1.111111
32	11.11	1115.111	1.111	1.111	1.111	1.111111
33	11.11	1115.111	1.111	1.111	1.111	1.111111
34	11.11	1115.111	1.111	1.111	1.111	1.111111
35	11.11	1115.111	1.111	1.111	1.111	1.111111
36	11.11	1115.111	1.111	1.111	1.111	1.111111
37	11.11	1115.111	1.111	1.111	1.111	1.111111
38	11.11	1115.111	1.111	1.111	1.111	1.111111
39	11.11	1115.111	1.111	1.111	1.111	1.111111
40	11.11	1115.111	1.111	1.111	1.111	1.111111
41	11.11	1115.111	1.111	1.111	1.111	1.111111
42	11.11	1115.111	1.111	1.111	1.111	1.111111
43	11.11	1115.111	1.111	1.111	1.111	1.111111
44	11.11	1115.111	1.111	1.111	1.111	1.111111
45	11.11	1115.111	1.111	1.111	1.111	1.111111
46	11.11	1115.111	1.111	1.111	1.111	1.111111
47	11.11	1115.111	1.111	1.111	1.111	1.111111
48	11.11	1115.111	1.111	1.111	1.111	1.111111
49	11.11	1115.111	1.111	1.111	1.111	1.111111
50	11.11	1115.111	1.111	1.111	1.111	1.111111
51	11.11	1115.111	1.111	1.111	1.111	1.111111
52	11.11	1115.111	1.111	1.111	1.111	1.111111
53	11.11	1115.111	1.111	1.111	1.111	1.111111
54	11.11	1115.111	1.111	1.111	1.111	1.111111
55	11.11	1115.111	1.111	1.111	1.111	1.111111
56	11.11	1115.111	1.111	1.111	1.111	1.111111
57	11.11	1115.111	1.111	1.111	1.111	1.111111
58	11.11	1115.111	1.111	1.111	1.111	1.111111
59	11.11	1115.111	1.111	1.111	1.111	1.111111
60	11.11	1115.111	1.111	1.111	1.111	1.111111
61	11.11	1115.111	1.111	1.111	1.111	1.111111
62	11.11	1115.111	1.111	1.111	1.111	1.111111
63	11.11	1115.111	1.111	1.111	1.111	1.111111
64	11.11	1115.111	1.111	1.111	1.111	1.111111
65	11.11	1115.111	1.111	1.111	1.111	1.111111
66	11.11	1115.111	1.111	1.111	1.111	1.111111
67	11.11	1115.111	1.111	1.111	1.111	1.111111
68	11.11	1115.111	1.111	1.111	1.111	1.111111
69	11.11	1115.111	1.111	1.111	1.111	1.111111
70	11.11	1115.111	1.111	1.111	1.111	1.111111
AVERAGE						
NO.	NO.	NO.	NO.	NO.	NO.	NO.
31	11.11	1115.111	1.111	1.111	1.111	1.111111
32	11.11	1115.111	1.111	1.111	1.111	1.111111
33	11.11	1115.111	1.111	1.111	1.111	1.111111
34	11.11	1115.111	1.111	1.111	1.111	1.111111
35	11.11	1115.111	1.111	1.111	1.111	1.111111

DATE 12/14/78
 1MM SAMPLE # 1 JPL 4-457 SPEC. 1
 DISLOCATION PITS
 .31 MM SPEC SIZE
 MEASUREMENT ALONG HC CENTER LINE OF THE SAMPLE
 AVERAGE AREA OF ONE DISLOCATION PIT = .43 μ^2

MAG=811.1 UNITS=MICRONS CAL. FACTOR=
 FRAME AREA= 7.515625111 11

1.775111 UNITS/20

FIELD NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	44.58	1.112	469.443	5.11.11	1.049751
2	241.17	1.112	191.142	1.65.474	1.042448
3	464.74	1.117	135.186	1.24.512	1.074496
4	211.62	1.114	115.175	2.71.617	1.488291
5	73.25	1.112	829.614	5.05.158	1.124172
6	311.47	1.119	194.512	1.12.228	1.091114
7	419.74	1.112	119.274	1.27.681	1.087792
8	124.54	1.114	337.233	2.89.152	1.144578
9	1.11	1.111	55555555	55555555	1.111
10	225.28	1.116	224.449	1.19.448	1.201111
11	151.12	1.114	122.155	2.84.697	1.637817
12	371.59	1.111	144.453	75.181	1.200149
13	526.94	1.115	89.799	79.148	1.181254
14	579.37	1.114	82.197	77.077	1.177422
15	61.25	1.112	625.849	655.594	1.897877
16	371.22	1.111	124.834	114.699	1.187879
17	157.54	1.115	74.366	29.934	1.601248
18	324.17	1.119	145.349	145.575	1.128777
19	3191.77	1.119	17.543	17.533	1.152955
20	1701.44	1.119	27.325	27.372	1.177792
21	1979.19	1.155	29.565	24.799	1.844617
22	1472.13	1.141	42.926	42.614	1.457951
23	252.21	1.117	178.571	145.744	1.179352
24	244.58	1.118	172.118	146.119	1.101772
25	471.17	1.113	129.249	119.171	1.169577
26	491.04	1.114	97.454	94.471	1.259947
27	338.67	1.119	154.763	147.871	1.114777
28	591.22	1.117	87.781	51.787	1.509439
29	113.52	1.110	437.679	384.221	1.151896
30	141.94	1.114	184.679	172.529	1.821174
31	167.72	1.115	159.575	277.791	1.874888
32	432.47	1.112	137.242	119.947	1.725785
33	186.16	1.115	212.677	214.741	1.147777
34	534.24	1.114	99.628	97.118	1.172477
35	297.79	1.118	185.753	159.168	1.251971

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	528.45	1.115	55555555	55555555	1.119	55555555
SE	442.48	1.118	55555555	55555555	1.121	55555555
	119.47	1.111	55555555	55555555	1.111	55555555

36	131.14	1.114	379.585	147.957	1.114	1.430077
37	221.11	1.114	422.297	172.718	1.117	2.445170
38	594.12	1.117	89.885	84.485	1.119	1.670488
39	435.02	1.112	122.799	114.467	1.114	1.771077
40	15.24	1.111	1217.572	1739.284	1.111	1.170718
41	126.44	1.119	147.871	129.311	1.113	1.171145
42	175.17	1.117	191.978	244.778	1.115	1.281878
43	281.58	1.118	191.718	141.676	1.119	1.771795
44	12.18	1.113	1454.284	1774.787	1.113	1.546875
45	41.25	1.112	787.815	781.253	1.112	1.414777
46	375.65	1.111	158.898	72.292	1.115	1.576978
47	55.19	1.112	768.441	684.117	1.111	1.101577
48	111.53	1.119	142.144	127.119	1.113	1.117141
49	114.51	1.114	114.373	174.549	1.114	1.881994
50	47.41	1.111	1377.584	1147.297	1.111	1.184495
51	173.66	1.115	258.264	272.639	1.117	1.749717
52	44.87	1.111	984.842	848.354	1.112	1.949219
53	354.87	1.111	227.549	247.574	1.112	1.671217
54	1721.99	1.119	12.197	29.778	1.153	2.140027
55	416.42	1.118	72.787	9.177	1.125	1.107095
56	2948.29	1.184	21.461	17.991	1.178	1.065194
57	1669.74	1.147	32.314	31.715	1.151	1.890487
58	412.73	1.112	114.897	114.899	1.115	1.122958
59	259.23	1.117	197.698	147.328	1.113	1.172177
60	1717.24	1.119	17.112	25.948	1.158	2.591457
61	24.57	1.111	1474.177	1414.779	1.111	1.114479
62	33.95	1.111	748.447	776.174	1.111	1.417188
63	19.85	1.111	1745.141	1745.141	1.112	1.384821
64	27.25	1.111	2577.784	2474.147	1.111	1.571257
65	1.11	1.111	55555555	55555555	1.111	55555555
66	25.21	1.111	984.842	944.495	1.112	1.748779
67	1.07	1.111	55555555	55555555	1.111	55555555
68	144.13	1.114	334.821	139.496	1.115	1.117478
69	3.97	1.113	55555555	55555555	1.113	55555555
70	411.85	1.111	141.614	14.777	1.114	1.107546

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	461.36	1.113	55555555	55555555	1.114	55555555
SE	641.49	1.118	55555555	55555555	1.119	55555555
	74.47	1.112	55555555	55555555	1.112	55555555

MTE 12/16/78
 IHM SAMPLE 72 JPL 4-457 SPEC. 1
 TWINS ONLY
 STM OUTPUT DATA DIVIDED BY 100
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE AREA OF ONE TWIN = 31.14X111

MAG-834.3 UNIFORM-MM GAL. FACTOR- 3.193375 NITS/22
 FRAME AREA- 1.171111

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	25.55	363.315	17.417	1.645	1.651	1.177779
2	8.99	127.799	26.784	1.827	1.277	1.177775
3	39.63	563.229	5.357	1.687	1.525	1.177774
4	31.16	443.189	7.339	1.284	1.843	1.177778
5	47.21	671.492	7.759	1.196	1.724	1.177779
6	49.78	737.916	6.257	1.091	1.163	1.177777
7	22.33	317.216	9.375	1.953	1.555	1.177777
8	54.34	768.621	5.357	1.123	1.971	1.177772
9	34.66	492.949	8.523	1.114	1.939	1.177778
10	8.66	123.235	18.759	1.989	1.269	1.177775
11	39.15	559.578	8.152	1.293	1.963	1.177777
12	55.13	783.683	17.417	1.232	1.848	1.177771
13	65.35	925.175	1.573	1.043	1.259	1.177771
14	47.91	671.443	7.669	1.431	1.711	1.177771
15	73.17	1119.281	4.934	1.751	1.433	1.177772
16	87.93	1257.636	5.368	1.872	1.235	1.177779
17	56.45	832.853	4.573	1.741	1.443	1.177778
18	87.29	1241.478	4.261	1.456	1.624	1.177772
19	57.96	824.335	1.934	1.727	1.475	1.177773
20	75.74	1177.164	5.357	1.824	1.285	1.177772
21	38.61	549.383	6.259	1.264	1.237	1.177776
22	26.22	172.933	11.719	1.829	1.584	1.177778
23	36.68	521.694	5.859	1.952	1.179	1.177776
24	33.79	483.416	7.436	1.116	1.733	1.177779
25	43.93	624.399	1.238	1.716	1.467	1.177777

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	45.88	652.524	7.874	1.293	1.135	1.177779
SE	29.71	294.594	5.764	1.44	1.369	1.177777
	4.14	58.919	1.113	1.169	1.374	1.177771

26	91.95	1293.513	3.324	1.464	1.296	1.177774
27	98.46	1433.314	4.688	1.794	1.363	1.1777729
28	1.33	3.333	555555555	555555555	1.111	555555555555
29	5.71	81.244	11.251	1.859	1.184	1.177776
30	13.72	192.446	18.757	1.94	1.547	1.177773
31	31.97	723.891	7.511	1.194	1.896	1.177772
32	49.23	717.157	7.212	1.072	1.191	1.177778
33	17.33	246.473	11.719	1.953	1.547	1.177776
34	36.97	525.872	1.682	1.741	1.435	1.177776
35	41.62	591.984	6.466	1.651	1.589	1.177775
36	25.61	364.220	13.393	1.524	1.685	1.177777
37	32.77	455.111	7.112	1.133	1.63	1.177776
38	47.43	674.597	5.449	1.497	1.515	1.177776
39	22.98	326.831	11.129	1.276	1.819	1.177775
40	54.38	769.777	7.813	1.931	1.181	1.177779
41	51.35	737.281	6.466	1.733	1.424	1.177776
42	49.94	711.198	7.312	1.864	1.231	1.177777
43	52.37	882.727	6.944	1.721	1.443	1.177777
44	64.31	914.677	6.466	1.738	1.421	1.177779
45	25.32	363.143	11.129	1.838	1.581	1.177779
46	13.32	189.112	14.123	1.236	1.487	1.177774
47	28.79	439.414	5.696	1.972	1.393	1.177775
48	11.34	157.313	18.759	1.717	1.392	1.177775
49	10.42	151.777	18.751	1.332	1.461	1.177774
50	14.44	234.146	17.345	1.593	1.574	1.177775

AVERAGE

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	41.38	587.174	555555555	555555555	1.931	555555555555
SE	23.37	332.323	555555555	555555555	1.451	555555555555
	3.30	46.998	555555555	555555555	1.364	555555555555

DATE 12/14/78
 IBM SAMPLE #2 JPL 4-457 SP20.
 DISLOCATION PITS
 .31 MM STEP SIZE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE AREA OF ONE DISLOCATION PIT - 7.14 SQ.

MAG-910:1111-MICROING CAL. MAG-11- 1.175111 UNIT 122
 FRAME AREA- 1.515625111 14

FIELD	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
1	273.25	1.118	142.912	112.497	1.111	1.129453
2	331.99	1.119	112.175	112.417	1.115	1.517107
3	1.11	1.111	55555555	55555555	1.111	5555555555
4	243.45	1.117	133.238	124.874	1.113	1.772417
5	156.59	1.114	236.146	227.588	1.118	1.737227
6	1.11	1.111	55555555	55555555	1.111	5555555555
7	272.58	1.118	153.489	144.453	1.111	1.914717
8	424.19	1.112	134.987	132.459	1.114	2.786799
9	111.29	1.113	389.374	432.328	1.114	2.531257
10	299.73	1.119	121.281	118.171	1.114	1.412584
11	175.54	1.115	299.521	181.486	1.117	2.414577
12	35.89	1.111	1333.223	1145.741	1.112	1.564457
13	13.89	1.111	3936.254	1878.235	1.111	1.139963
14	34.41	1.111	892.857	919.119	1.112	1.125797
15	81.24	1.112	1347.114	868.756	1.112	2.627575
16	331.74	1.119	194.976	99.276	1.113	2.844893
17	264.25	1.118	142.745	132.793	1.112	1.527452
18	28.49	1.111	946.977	931.442	1.112	1.993757
19	217.27	1.114	179.942	179.154	1.111	1.529476
20	21.13	1.111	1512.097	1464.844	1.111	1.162777
21	151.13	1.111	115.219	131.681	1.116	1.425471
22	217.62	1.116	173.933	172.135	1.117	1.288451
23	145.83	1.114	217.517	213.554	1.118	1.782114
24	1217.47	1.115	34.645	16.979	1.144	2.76458
25	152.92	1.114	218.531	194.399	1.119	1.917777

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	213.87	1.116	55555555	55555555	1.119	5555555555
SE	238.26	1.117	55555555	55555555	1.119	5555555555
	47.65	1.111	55555555	55555555	1.112	5555555555

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
26	49.87	1.111	1464.844	1378.476	1.112	1.988478
27	12.37	1.111	1467.175	2678.171	1.111	1.178125
28	22.18	1.111	1332.787	1246.892	1.111	1.892438
29	647.98	1.118	58.172	55.471	1.129	1.741017
30	286.56	1.118	794.492	145.749	1.112	19.987577
31	186.29	1.115	195.113	189.794	1.110	1.527775
32	136.16	1.114	473.485	497.078	1.114	2.267857
33	834.37	1.123	51.524	42.976	1.116	1.925787
34	31.33	1.111	712.422	757.815	1.112	1.789844
35	46.24	1.111	738.189	744.748	1.112	1.179878
36	279.73	1.118	147.548	149.555	1.112	1.631976
37	179.33	1.115	262.435	128.955	1.119	1.757584
38	314.78	1.119	153.941	92.914	1.115	2.784454
39	763.58	1.122	69.995	57.725	1.117	2.544278
40	313.44	1.119	323.276	112.137	1.112	1.290715
41	51.47	1.111	1332.787	139.797	1.113	1.244141
42	173.56	1.115	231.111	221.118	1.117	1.714777
43	1.11	1.111	55555555	55555555	1.117	5555555555
44	1.11	1.111	55555555	55555555	1.119	5555555555
45	96.24	1.113	298.567	117.797	1.116	1.782451
46	146.91	1.114	236.146	232.479	1.117	1.743215
47	1.11	1.111	55555555	55555555	1.117	5555555555
48	321.56	1.119	148.779	12.148	1.119	1.720019
49	58.87	1.112	1736.111	627.861	1.112	1.599472
50	1.11	1.111	55555555	55555555	1.111	5555555555

	NO.	NO./AREA	MFPV	MFPH	L/A	AREA
SD	235.37	1.116	55555555	55555555	1.119	5555555555
SE	230.33	1.117	55555555	55555555	1.119	5555555555
	33.30	1.111	55555555	55555555	1.111	5555555555

DATE 12/21/78
 100 SAMPLES 7 1 101 7 1-457 100 1
 DISLOCATION 101 101
 101 101 101
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE DISLOCATION 101 101 101

MAR-011.1 10111-11111 101. 10111-
 FRAME AREA= 1.515525111 101 1.175111 101111

FIELD	NO.	NO./AREA	MP3V	MP3H	L/A	MP3V
1	26.15	1.111	1872.895	1748.868	1.111	1.114570
2	113.85	1.111	453.721	453.800	1.114	1.151549
3	416.73	1.112	111.389	93.711	1.115	1.040534
4	172.88	1.115	274.123	249.474	1.114	1.710114
5	125.92	1.114	277.167	241.872	1.114	1.154638
6	198.85	1.111	242.615	114.329	1.111	1.171177
7	157.12	1.114	222.145	122.145	1.115	1.121503
8	916.15	1.123	81.112	81.149	1.124	1.111848
9	1315.94	1.129	58.581	57.124	1.127	1.525045
11	42.51	1.111	549.643	159.479	1.117	1.171459
11	139.42	1.114	318.878	284.497	1.114	1.004324
12	148.85	1.112	1542.511	221.747	1.115	1.748751
13	751.11	1.122	98.892	48.186	1.122	1.540112
14	47.51	1.111	744.148	917.511	1.112	1.078747
15	424.42	1.112	113.774	114.574	1.115	1.287150
16	261.54	1.117	281.589	184.547	1.110	1.641141
17	259.62	1.110	141.806	145.124	1.112	1.177157
18	49.21	1.112	527.841	429.195	1.113	1.125119
19	422.69	1.112	128.777	94.448	1.115	1.301237
21	114.14	1.113	179.555	179.555	1.114	1.142177
21	254.81	1.117	149.224	174.455	1.113	1.129437
22	817.59	1.124	85.771	44.711	1.124	1.505414
23	149.42	1.114	748.513	141.438	1.117	1.111711
24	275.15	1.110	149.112	150.410	1.111	1.141140
25	131.15	1.114	351.126	284.741	1.115	1.131437
26	84.92	1.112	718.189	591.154	1.112	1.015171
27	257.19	1.117	185.277	165.929	1.113	1.251784
28	219.42	1.116	219.771	12.134	1.110	1.181217
29	812.88	1.124	62.292	45.435	1.124	1.534123
31	199.42	1.115	111.114	145.941	1.115	1.071451
31	275.18	1.118	171.180	152.410	1.111	1.473410
32	241.14	1.140	12.894	20.528	1.151	1.301218
33	322.69	1.119	153.480	121.124	1.112	1.445444
34	549.14	1.114	91.184	81.111	1.121	1.411477
35	134.81	1.113	279.942	148.574	1.111	1.078821

	NO.	NO./AREA	MP3V	MP3H	L/A	MP3V
30	371.11	1.111	144.414	247.411	1.112	1.211704
SE	411.94	1.112	178.859	117.441	1.111	1.420714
SE	77.11	1.112	44.130	51.94	1.112	1.570442

35	519.14	1.118	98.997	77.845	1.111	1.154504
37	151.54	1.114	185.812	177.141	1.114	1.430404
38	114.21	1.114	111.372	247.847	1.114	1.028111
39	1.44	1.111	11192.847	11192.847	1.111	1.164511
41	591.58	1.117	115.894	75.111	1.121	1.001114
41	1.58	1.111	15275.171	193.209	1.112	1.131474
42	1.85	1.111	2111.5-2	2141.741	1.111	1.148418
43	715.94	1.121	71.169	79.255	1.123	1.473027
44	1.11	1.111	555555555	555555555	1.111	555555555
45	1.11	1.111	555555555	555555555	1.111	555555555
46	1.11	1.111	555555555	555555555	1.111	555555555
47	1.11	1.111	555555555	555555555	1.111	555555555
48	444.21	1.113	129.111	128.055	1.113	1.411131
49	1.11	1.111	555555555	555555555	1.113	555555555
51	2998.44	1.185	47.541	44.474	1.117	1.491883
51	11.58	1.111	5514.794	6251.111	1.111	1.578125
52	1.11	1.111	555555555	555555555	1.111	555555555
53	1.11	1.111	555555555	555555555	1.111	555555555
54	1.11	1.111	555555555	555555555	1.111	555555555
55	98.15	1.111	98.751	571.415	1.111	1.614251
56	154.42	1.111	137.161	149.741	1.112	1.471889
57	1471.15	1.111	45.248	47.545	1.114	1.121829
58	1731.94	1.129	48.131	64.849	1.125	1.741431
59	117.77	1.119	153.723	151.131	1.111	1.104151
61	13.44	1.111	4174.187	4174.187	1.111	1.040751
61	517.51	1.114	297.419	149.112	1.117	1.737115
62	225.15	1.112	129.173	98.997	1.117	1.175741
63	111.58	1.113	473.485	442.117	1.111	1.407194
64	258.85	1.117	172.971	174.937	1.113	1.141215
65	21.54	1.111	1951.125	1442.118	1.111	1.004375
66	15.11	1.111	2183.121	1013.245	1.111	1.175145
67	114.14	1.113	48.411	48.491	1.125	1.715143
68	447.12	1.113	99.522	97.942	1.117	1.127425
69	1413.45	1.143	18.414	19.242	1.144	1.728453
79	423.85	1.112	118.521	113.145	1.115	1.201713

	NO.	NO./AREA	MP3V	MP3H	L/A	MP3V
30	371.21	1.111	555555555	555555555	1.111	555555555
SE	519.59	1.114	555555555	555555555	1.111	555555555
SE	57.91	1.112	555555555	555555555	1.111	555555555

WFE 12/31/78
 100 SAMPLES 7 4 JUL 7 4-457 1980 1
 TWINS ONLY
 JTS DUTCH DATA DIVISION BY 111
 11 10 1980 SITE
 MEASUREMENT ALONG THE DUTCH LINE
 AVERAGE TWIN AREA 24.2-29.1

ORIGINAL PAGE IS
 OF POOR QUALITY

WFE 12/31/78 100 SAMPLES 7 4 JUL 7 4-457 1980 1
 TWINS ONLY

FIELD	NO.	NO./AREA	WFE	WFEH	L/A	AREA
1	25.51	342.432	8.523	1.414	1.450	1.111118
2	53.11	895.915	4.914	1.423	1.749	1.111112
3	24.51	348.519	18.753	4.143	1.245	1.111111
4	41.54	591.784	4.176	1.450	1.490	1.111113
5	62.69	891.599	8.523	2.974	1.192	1.111129
6	11.97	173.191	21.833	1.148	1.187	1.111111
7	43.94	424.932	7.111	2.315	1.404	1.111115
8	82.13	1158.122	8.523	1.155	1.515	1.111128
9	73.93	1451.491	1.989	1.111	1.111	1.111112
10	53.88	723.577	5.515	1.915	1.155	1.111116
11	59.11	841.451	5.482	1.914	1.171	1.111118
12	14.17	484.553	5.495	1.563	1.490	1.111117
13	42.54	616.514	7.212	1.150	1.773	1.111111
14	15.24	316.712	19.751	1.174	1.144	1.111116
15	55.98	795.216	5.248	1.179	1.917	1.111111
16	45.85	914.585	4.241	1.274	1.891	1.111114
17	71.18	996.748	4.688	1.179	1.917	1.111111
18	53.11	897.541	4.151	1.359	1.792	1.111117
19	39.43	543.486	1.152	1.474	1.445	1.111111
20	25.99	349.448	4.944	1.818	1.592	1.111119
21	9.11	129.539	21.833	7.813	1.149	1.111118
22	25.41	344.228	8.523	2.137	1.415	1.111117
23	51.15	713.279	4.944	1.257	1.445	1.111119
24	55.13	782.656	4.859	1.172	1.917	1.111110
25	11.71	1119.783	1.189	1.189	1.189	1.111111
26	73.24	996.915	5.157	1.172	1.915	1.111112
27	11.36	445.173	11.417	1.117	1.515	1.111112
28	67.14	953.188	5.248	1.442	1.789	1.111113
29	49.85	748.943	1.813	1.169	1.776	1.111113
30	91.31	1294.319	1.827	1.788	1.471	1.111112
31	49.12	698.645	4.048	1.314	1.117	1.111116
32	14.75	219.754	11.193	1.514	1.437	1.111115
33	52.35	854.721	1.588	1.172	1.927	1.111112
34	16.11	343.715	7.514	1.913	1.547	1.111114
35	12.88	183.198	9.848	1.183	1.517	1.111117

	NO.	NO./AREA	WFE	WFEH	L/A	AREA
	44.78	545.315	1.131	1.093	1.717	1.111111
30	22.13	314.791	4.597	1.134	1.202	1.111115
35	1.74	51.219	1.791	1.242	1.149	1.111111

36	22.48	319.783	8.920	1.723	1.421	1.111115
37	17.19	344.444	11.193	2.175	1.415	1.111115
38	14.29	233.252	12.511	2.841	1.374	1.111115
39	14.41	214.272	12.511	2.414	1.442	1.111114
40	15.41	218.971	18.753	1.141	1.244	1.111110
41	8.02	124.829	17.845	4.516	1.111	1.111115
42	2.13	31.352	93.153	11.117	1.191	1.111114
43	23.87	341.921	1.152	1.413	1.752	1.111114
44	8.42	125.745	11.933	4.934	1.227	1.111111
45	15.78	224.191	9.848	1.894	1.563	1.111114
46	17.21	145.257	18.751	1.233	1.319	1.111115
47	4.23	63.163	21.438	6.466	1.171	1.111111
48	1.11	1.111	223334555	533333333	1.111	1.1111111111
49	1.11	1.111	533333333	223333333	1.111	1.1111111111
50	1.11	1.111	533333333	533333333	1.111	1.1111111111
51	1.11	1.111	533333333	533333333	1.111	1.1111111111
52	82.24	1149.647	4.573	1.153	1.313	1.111110
53	77.17	1114.517	1.515	1.253	1.757	1.111117
54	41.15	591.133	4.466	1.123	1.944	1.111117
55	25.51	344.228	7.111	2.178	1.155	1.111117
56	51.26	723.697	5.149	1.234	1.975	1.111110
57	14.21	373.126	4.944	1.199	1.729	1.111117
58	24.22	315.009	4.149	1.823	1.570	1.111116
59	49.01	718.411	4.819	1.232	1.103	1.111117
60	51.39	715.531	5.455	1.194	1.945	1.111110
61	58.51	911.979	5.248	1.933	1.134	1.111110
62	51.52	843.715	4.175	1.141	1.244	1.111110
63	72.71	1734.115	4.488	1.997	1.175	1.111111
64	71.52	1334.375	5.157	1.258	1.824	1.111114
65	9.57	136.143	62.537	11.129	1.199	1.111118
66	12.51	462.131	14.423	2.287	1.469	1.111111
67	5.44	91.599	27.833	4.157	1.254	1.111113
68	8.18	114.975	24.786	7.212	1.155	1.111117
69	41.23	584.443	5.168	1.829	1.233	1.111116
70	19.19	271.545	7.813	1.176	1.824	1.111113

	NO.	NO./AREA	WFE	WFEH	L/A	AREA
30	17.25	529.226	533333333	533333333	1.119	1.1111111111
SE	15.11	157.173	533333333	533333333	1.154	1.1111111111
	3.13	426.714	533333333	533333333	1.142	1.1111111111

DATE 12/24/75

13M SAMPLE # 4 JPL # 4-457 SPEC 3

DISLOCATION PITS ONLY

31 MM SPEC TIME

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY

AVERAGE DISLOCATION PIT AREA = 1.73 μ^2

MAG-817.1 UNITS-MICRONS CAL. FACTOR-
FRAME 4561- 3.51542511 14

1.375113 INITIATED

FIELD NO.	NO./AREA	MPZY	MPZH	1/2	AREA	
1	246.61	1.117	1284.247	1.41.531	1.117	1.046125
2	19.44	1.111	2343.753	1421.455	1.112	1.472607
3	123.21	1.114	319.674	314.097	1.115	1.554690
4	124.18	1.113	314.723	293.731	1.115	1.540140
5	114.55	1.114	314.195	241.142	1.115	1.479375
6	455.57	1.113	161.182	131.595	1.112	1.377925
7	31.80	1.111	1714.545	1734.111	1.111	1.011543
8	561.43	1.115	115.293	135.293	1.115	1.214704
9	521.77	1.115	115.105	67.154	1.110	1.375532
10	296.51	1.115	151.899	145.344	1.111	1.531551
11	29.49	1.111	1399.254	1231.923	1.111	1.091234
12	182.55	1.115	437.639	147.871	1.117	1.242991
13	539.63	1.114	95.614	82.193	1.123	1.211293
14	295.11	1.119	256.840	129.480	1.111	1.277140
15	74.17	1.112	515.113	57.749	1.113	1.210441
16	222.34	1.115	236.954	217.871	1.118	1.377717
17	519.27	1.115	111.915	134.351	1.114	1.222715
18	213.99	1.114	243.534	233.339	1.117	1.451092
19	53.53	1.112	715.649	549.443	1.112	1.107477
20	446.97	1.113	133.128	135.861	1.112	1.264723
21	475.22	1.114	145.796	132.313	1.117	1.454881
22	284.82	1.118	185.277	162.478	1.117	1.587533
23	159.63	1.115	274.927	256.148	1.115	1.469758
24	325.45	1.119	444.313	132.124	1.111	1.102151
25	497.73	1.114	47.291	97.031	1.119	1.314959
26	3.43	1.111	3333333333	3333333333	1.111	3333333333
27	792.15	1.123	89.456	52.876	1.124	1.282632
28	164.75	1.115	318.878	313.545	1.115	1.483383
29	1.22	1.111	13392.857	31254.333	1.111	1.402108
30	3.14	1.113	7812.593	11718.753	1.113	1.245455
31	3.39	1.111	5555555555	5555555555	1.111	5555555555
32	3.73	1.113	13416.667	31252.333	1.113	1.542533
33	524.38	1.115	94.697	93.543	1.118	1.723441
34	3.33	1.111	5555555555	5555555555	1.111	5555555555
35	328.13	1.119	342.449	119.375	1.111	1.148256
AVERAGE						
NO.	247.87	1.117	3333333333	3333333333	1.110	3333333333
SD	213.11	1.116	3333333333	3333333333	1.117	3333333333
SE	35.52	1.111	5555555555	5555555555	1.111	5555555555
36	6.11	1.117	4251.319	8522.737	1.111	1.239460
37	3.65	1.117	8522.727	17416.467	1.111	1.597425
38	19.55	1.111	1951.125	2383.333	1.111	1.125317
39	5.38	1.111	4210.313	5514.736	1.111	1.125131
40	111.17	1.119	153.417	151.045	1.114	1.402467
41	114.49	1.119	141.616	142.345	1.112	1.324734
42	464.32	1.113	137.153	82.045	1.119	1.404843
43	298.43	1.118	164.474	177.894	1.111	1.448310
44	1.17	1.111	5555555555	5555555555	1.111	5555555555
45	35.43	1.111	1284.247	1350.496	1.111	1.350773
46	3.11	1.111	5555555555	5555555555	1.111	5555555555
47	5.11	1.111	4451.204	7912.511	1.111	1.061751
48	1733.68	1.112	35.574	15.731	1.149	1.414931
49	963.35	1.127	52.469	53.731	1.132	1.732731
50	448.49	1.113	96.553	95.859	1.117	1.268506
51	389.73	1.111	114.351	119.075	1.115	1.347717
52	239.12	1.114	174.011	185.177	1.113	1.025452
53	393.90	1.114	134.571	96.461	1.115	1.245243
54	12.91	1.111	2841.939	3232.759	1.111	1.045133
55	95.34	1.112	457.317	143.135	1.113	1.375313
56	1643.11	1.117	32.045	31.747	1.149	1.264043
57	114.41	1.113	544.750	144.186	1.117	1.340000
58	244.33	1.107	241.385	126.841	1.111	1.711957
59	715.94	1.123	133.547	115.932	1.114	1.041103
60	1.11	1.111	5555555555	5555555555	1.111	5555555555
61	19.23	1.111	23437.511	23437.441	1.112	1.154253
62	74.51	1.112	1616.179	239.158	1.112	3333333333
63	5.75	1.113	5218.333	13392.857	1.117	1.544975
64	5.93	1.113	7812.531	4606.429	1.113	1.503753
65	32.11	1.111	1512.197	1114.371	1.111	1.175134
66	471.33	1.111	93.132	96.449	1.110	1.315910
67	129.14	1.114	325.321	341.577	1.115	1.317247
68	131.37	1.114	297.419	338.448	1.115	1.221475
69	3111.32	1.100	19.339	19.032	1.101	1.574100
70	37.17	1.111	1119.322	1193.116	1.112	1.044233
AVERAGE						
NO.	332.98	1.110	5555555555	5555555555	1.111	5555555555
SD	471.12	1.113	5555555555	5555555555	1.114	5555555555
SE	55.14	1.112	5555555555	5555555555	1.112	5555555555

DATE 12/11/78

EIM SAMPLE # 5 JUL 7 1-457 1-200

EIMS ONLY

EIM DATA DATA DELETED BY 111

- 11 1000 1112

MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE

AVERAGE FOR AREA = 11.49 111

KAR-111.1 1112-111 111.1 111.1
FRAME AREA- 11.17111

1.11175 111222

FIELD	NO.	NO./AREA	MPH	MPH	L/A	WETA
1	51.35	733.242	5.682	1.734	1.475	1.111114
2	51.33	715.777	1.368	1.119	1.353	1.111110
3	33.45	433.713	7.111	1.423	1.728	1.111110
4	58.23	827.751	4.174	1.911	1.233	1.111110
5	88.71	1251.719	3.827	1.434	1.172	1.111124
6	62.57	889.822	5.682	1.512	1.739	1.111122
7	1.75	11.734	187.111	11.751	1.115	1.111111
8	17.75	252.415	11.423	2.841	1.179	1.111118
9	14.99	213.243	11.719	1.289	1.165	1.111119
10	25.36	363.588	1.482	1.512	1.734	1.111118
11	17.57	534.257	5.515	2.155	1.531	1.111113
12	57.94	824.113	6.694	1.723	1.651	1.111119
13	54.39	772.237	1.434	1.119	1.132	1.111112
14	5.73	95.455	14.423	1.989	1.283	1.111114
15	65.29	928.551	2.933	1.952	1.171	1.111115
16	43.83	632.922	5.168	1.112	1.237	1.111112
17	41.91	532.777	4.167	1.184	1.711	1.111118
18	51.43	862.292	4.748	1.633	1.683	1.111125
19	56.36	874.433	1.915	1.957	1.141	1.111111
20	41.96	594.792	5.465	2.138	1.149	1.111116
21	45.77	553.919	5.357	1.589	1.694	1.111115
22	16.44	233.771	7.813	2.513	1.451	1.111118
23	19.19	271.555	11.129	1.457	1.435	1.111117
24	33.17	474.374	5.348	1.399	1.747	1.111118
25	54.83	835.429	3.419	1.852	1.275	1.111111
26	57.32	815.145	3.538	1.748	1.197	1.111118
27	41.45	874.357	2.974	1.735	1.547	1.111119
28	67.34	953.747	3.348	1.913	1.214	1.111112
29	114.43	1484.748	3.753	1.123	1.733	1.111113
30	73.94	1352.232	1.538	1.915	1.219	1.111111
31	47.45	659.115	4.573	1.111	1.047	1.111111
32	11.49	271.424	1.909	1.179	1.935	1.111115
33	16.47	232.838	11.129	2.183	1.483	1.111115
34	14.33	145.982	12.514	2.799	1.181	1.111115
35	14.21	272.341	11.129	1.577	1.243	1.111112

AVERAGE

	NO.	NO./AREA	MPH	MPH	L/A	WETA
SD	44.53	632.924	11.541	2.433	1.794	1.111112
SE	31.64	715.271	11.154	5.178	1.159	1.111117
	4.31	56.843	5.131	1.847	1.141	1.111111

36	7.58	137.787	14.423	5.515	1.115	1.111110
37	27.95	397.551	7.212	2.141	1.435	1.111111
38	5.84	83.155	17.531	7.533	1.141	1.111118
39	15.62	222.116	11.719	1.717	1.473	1.111117
40	13.42	191.843	14.423	1.124	1.352	1.111114
41	16.18	238.510	11.719	1.552	1.415	1.111116
42	5.7	91.011	11.111	4.143	1.243	1.111114
43	17.22	244.969	9.248	2.334	1.464	1.111118
44	12.43	175.372	14.423	1.989	1.275	1.111117
45	33.51	475.417	3.423	1.554	1.584	1.111111
46	7.15	111.721	21.833	5.157	1.115	1.111116
47	7.15	114.521	18.753	3.125	1.141	1.111117
48	23.65	334.425	6.148	1.379	1.768	1.111115
49	8.47	119.452	17.345	1.289	1.325	1.111114
50	3.71	52.727	62.533	11.417	1.134	1.111115
51	25.26	359.288	8.152	2.134	1.448	1.111112
52	19.59	278.545	6.148	2.155	1.517	1.111112
53	11.23	152.111	11.333	1.476	1.111	1.111114
54	17.55	245.535	17.115	5.157	1.110	1.111117
55	11.55	144.215	11.329	1.233	1.341	1.111119
56	51.37	858.559	4.934	1.589	1.723	1.111112
57	26.51	377.321	7.813	1.823	1.473	1.111110
58	34.42	489.472	5.682	1.465	1.731	1.111111
59	45.47	645.719	1.818	1.378	1.314	1.111119
60	18.72	692.913	5.218	1.114	1.987	1.111111
61	2.49	38.152	17.511	1.249	1.112	1.111114
62	1.11	1.111	11.111	1.111	1.111	1.111111
63	1.11	1.111	11.111	1.111	1.111	1.111111
64	1.11	1.111	11.111	1.111	1.111	1.111111
65	1.11	1.111	11.111	1.111	1.111	1.111111
66	1.11	1.111	11.111	1.111	1.111	1.111111
67	1.11	1.111	11.111	1.111	1.111	1.111111
68	4.13	59.793	23.438	1.944	1.195	1.111117
69	9.25	131.584	12.133	1.044	1.433	1.111117
70	8.34	114.319	12.513	1.676	1.349	1.111114

AVERAGE

	NO.	NO./AREA	MPH	MPH	L/A	WETA
SD	29.82	424.114	11.111	1.572	1.111	1.111111
SE	24.57	349.411	11.111	1.184	1.111	1.111111
	2.94	41.743	11.111	1.144	1.111	1.111111

DATE 12/12/70
 144 SAMPLE 7.3 JUL 7 0-457 5000 2
 DISLOCATION PITS ONLY
 .31 MM TEST SITE
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PIT AREA = 5.37 13

ORIGINAL PAGE IS
 OF POOR QUALITY

MAG-834.3 INITS-MICRONS CAL. FACTOR- 1.775717 INITS/μ
 FRAME AREA- 3.515525117 14

FIELD	NO.	NO./AREA	MPH	MPH	L/A	AREA
1	7.69	1.111	4464.284	4467.107	1.111	1.037517
2	38.85	1.111	1714.545	721.154	1.111	1.775717
3	117.69	1.111	569.192	749.194	1.111	1.431210
4	1.01	1.111	551.111	551.111	1.111	551.111
5	98.18	1.111	561.177	197.246	1.111	1.550173
6	472.31	1.111	125.819	97.656	1.111	1.753173
7	819.81	1.111	64.168	68.985	1.111	1.514319
8	284.23	1.111	192.111	196.712	1.111	1.473475
9	596.54	1.111	133.821	64.155	1.111	2.457757
10	169.62	1.111	297.887	218.123	1.111	1.333594
11	2329.62	1.111	28.917	17.773	1.111	1.484950
12	483.96	1.111	131.133	97.583	1.111	1.225444
13	564.42	1.111	241.103	78.914	1.111	1.163215
14	2343.27	1.111	35.151	29.215	1.111	2.658613
15	121.15	1.111	459.559	414.667	1.111	1.474563
16	18.85	1.111	2232.143	2467.135	1.111	1.794175
17	7.51	1.111	497.511	5859.175	1.111	1.014744
18	11.18	1.111	5859.175	2467.135	1.111	3.954250
19	29.34	1.111	1838.235	928.218	1.111	1.514741
20	73.19	1.111	625.111	649.547	1.111	1.143425
21	73.13	1.111	1116.771	551.471	1.111	2.225547
22	276.54	1.111	219.732	221.138	1.111	1.543455
23	111.96	1.111	419.182	48.565	1.111	1.135917
24	3.19	1.111	9375.111	15424.137	1.111	1.949219
25	22.12	1.111	2634.167	1346.892	1.111	1.851151
26	216.54	1.111	689.138	174.181	1.111	2.197447
27	25.38	1.111	4261.164	1733.229	1.111	1.323313
28	14.35	1.111	1724.194	1072.885	1.111	1.438125
29	7.11	1.111	5859.175	1574.167	1.111	1.751251
30	25.95	1.111	1551.514	1149.195	1.111	1.111197
31	25.92	1.111	1551.514	1644.737	1.111	1.111197
32	42.38	1.111	1734.545	852.273	1.111	1.647625
33	34.19	1.111	1953.125	1872.885	1.111	1.498317
34	11.92	1.111	3348.214	3615.769	1.111	1.245534
35	111.15	1.111	353.172	337.233	1.111	1.733472

1/21/85					
NO.	NO./AREA	MPH	MPH	L/A	AREA
36	246.18	1.111	551.111	1.111	551.111
37	517.14	1.111	551.111	1.111	551.111
38	87.41	1.111	551.111	1.111	551.111
39	241.11	1.111	239.771	110.254	1.513071
40	173.27	1.111	279.191	252.695	1.977219
41	121.88	1.111	111.454	121.181	1.344407
42	594.11	1.111	91.185	10.159	1.334445
43	1219.21	1.111	47.759	38.049	1.824790
44	321.52	1.111	215.742	247.161	1.444518
45	578.05	1.111	45.179	97.741	1.911713
46	453.77	1.111	83.133	92.454	1.614583
47	377.96	1.111	127.179	126.841	1.107462
48	11.10	1.111	110.254	110.254	1.107462
49	449.21	1.111	137.183	134.167	1.234812
50	7.51	1.111	5238.133	7472.222	1.787482
51	9.13	1.111	551.111	551.111	551.111
52	93.45	1.111	498.671	538.793	1.457114
53	132.31	1.111	452.699	454.119	1.334445
54	219.14	1.111	22.484	35.742	1.261196
55	511.15	1.111	21.169	79.181	1.170478
56	1295.12	1.111	48.177	47.189	1.920236
57	523.69	1.111	124.337	135.119	1.945467
58	732.31	1.111	81.128	71.123	1.504915
59	583.45	1.111	151.147	77.131	1.711277
60	7.11	1.111	551.111	551.111	551.111
61	111.15	1.111	97.113	114.449	1.501751
62	391.11	1.111	1.111	114.449	1.501751
63	1.11	1.111	91.1403	104.111	1.177734
64	523.69	1.111	4.779	74.843	1.418454
65	517.69	1.111	114.598	113.143	1.323313
66	241.11	1.111	211.474	107.785	1.201122
67	221.96	1.111	232.151	251.141	1.415137
68	463.48	1.111	113.591	91.492	1.131275
69	535.38	1.111	117.635	113.175	1.438375
70	924.74	1.111	15.962	17.114	1.912495
71	276.92	1.111	244.778	237.044	1.336149
72	1.11	1.111	551.111	551.111	551.111
73	1.11	1.111	551.111	551.111	551.111
AVERAGE					
NO.	NO./AREA	MPH	MPH	L/A	AREA
39	241.11	1.111	239.771	110.254	1.513071
40	173.27	1.111	279.191	252.695	1.977219
41	121.88	1.111	111.454	121.181	1.344407
42	594.11	1.111	91.185	10.159	1.334445
43	1219.21	1.111	47.759	38.049	1.824790
44	321.52	1.111	215.742	247.161	1.444518
45	578.05	1.111	45.179	97.741	1.911713
46	453.77	1.111	83.133	92.454	1.614583
47	377.96	1.111	127.179	126.841	1.107462
48	11.10	1.111	110.254	110.254	1.107462
49	449.21	1.111	137.183	134.167	1.234812
50	7.51	1.111	5238.133	7472.222	1.787482
51	9.13	1.111	551.111	551.111	551.111
52	93.45	1.111	498.671	538.793	1.457114
53	132.31	1.111	452.699	454.119	1.334445
54	219.14	1.111	22.484	35.742	1.261196
55	511.15	1.111	21.169	79.181	1.170478
56	1295.12	1.111	48.177	47.189	1.920236
57	523.69	1.111	124.337	135.119	1.945467
58	732.31	1.111	81.128	71.123	1.504915
59	583.45	1.111	151.147	77.131	1.711277
60	7.11	1.111	551.111	551.111	551.111
61	111.15	1.111	97.113	114.449	1.501751
62	391.11	1.111	1.111	114.449	1.501751
63	1.11	1.111	91.1403	104.111	1.177734
64	523.69	1.111	4.779	74.843	1.418454
65	517.69	1.111	114.598	113.143	1.323313
66	241.11	1.111	211.474	107.785	1.201122
67	221.96	1.111	232.151	251.141	1.415137
68	463.48	1.111	113.591	91.492	1.131275
69	535.38	1.111	117.635	113.175	1.438375
70	924.74	1.111	15.962	17.114	1.912495
71	276.92	1.111	244.778	237.044	1.336149
72	1.11	1.111	551.111	551.111	551.111
73	1.11	1.111	551.111	551.111	551.111

DATE 12/21/78

10M SAMPLE * 4 JPL * 4-457 SPEC F
TWINS ONLY

10M DIPPLE DATA DIVIDED BY 100

.31 MM STEP SIZE

MEASUREMENT ALONG THE CENTER LINE IN THE SAMPLE ONLY

AVERAGE D-18 AREA = 24.71211

MAG=511.1 INITS/MY CAL. FACTOR= 1.171113

1.111775 INITS/22

FIELD	NJ.	WJ./JPL	WJ2/J	WJ3/J	L/J	WJ2/J
1	12.13	172.524	11.253	4.253	7.173	1.111111
2	51.11	854.031	8.153	1.742	1.119	1.111111
3	66.67	948.149	5.515	1.123	1.041	1.111115
4	75.12	1144.913	4.934	1.022	1.206	1.111111
5	44.79	517.171	7.813	1.179	1.173	1.111119
6	53.41	911.816	6.466	1.962	1.196	1.111119
7	43.61	651.452	7.511	1.123	1.016	1.111117
8	61.19	711.471	7.111	1.101	1.061	1.111111
9	46.74	644.769	6.666	1.114	1.255	1.111117
10	65.91	1236.121	4.241	1.942	1.149	1.111117
11	26.29	177.911	6.940	1.769	1.417	1.111119
12	75.99	1387.782	4.241	1.692	1.541	1.111111
13	21.35	113.421	12.513	2.344	1.136	1.111111
14	27.72	194.174	9.849	1.521	1.699	1.111117
15	18.13	247.911	24.786	3.751	1.201	1.111114
16	14.16	143.571	13.191	2.447	1.317	1.111119
17	57.49	817.645	7.441	1.674	1.664	1.111111
18	12.17	1149.672	6.666	1.349	1.015	1.111115
19	13.91	195.152	21.439	1.727	1.201	1.111119
20	16.73	287.181	11.120	1.159	1.721	1.111114
21	42.89	519.911	7.111	1.151	1.114	1.111116
22	96.39	1176.111	4.913	1.067	1.184	1.111111
23	91.51	1299.155	1.827	1.724	1.025	1.111115
24	53.28	784.117	6.944	1.313	1.912	1.111112
25	24.72	351.561	17.145	2.717	4.397	1.111119
26	54.41	918.951	6.149	1.794	1.328	1.111119
27	13.22	145.418	17.511	1.751	1.277	1.111115
28	19.91	567.824	11.719	1.111	1.714	1.111118
29	15.88	511.295	17.191	1.813	1.589	1.111111
30	58.95	918.419	6.696	1.123	1.957	1.111119
31	49.31	597.262	11.417	1.613	1.653	1.111112
32	21.91	111.611	17.145	1.913	1.547	1.111115
33	7.19	132.272	18.753	4.148	3.179	1.111115
34	51.46	874.117	4.934	7.082	1.154	1.111111
35	94.71	1175.147	4.571	1.724	1.447	1.111111

FIELD	NJ.	WJ./JPL	WJ2/J	WJ3/J	L/J	WJ2/J
36	14.16	503.114	11.075	1.517	1.011	1.111111
37	25.79	166.811	7.916	1.753	1.166	1.111115
38	4.16	52.111	1.316	1.229	1.162	1.111111

FIELD	NJ.	WJ./JPL	WJ2/J	WJ3/J	L/J	WJ2/J
39	81.42	1158.119	1.989	1.785	1.773	1.111111
40	84.76	1215.427	5.219	7.919	1.147	1.111111
41	14.17	228.514	15.525	2.287	1.461	1.111115
42	19.74	365.164	6.251	1.194	1.026	1.111117
43	11.16	354.727	9.919	1.951	1.547	1.111119
44	17.75	514.929	7.212	2.155	1.521	1.111112
45	1.31	1.111	1.111	1.111	1.111	1.111111
46	1.49	21.971	91.751	15.625	7.149	1.111111
47	11.42	445.912	9.849	1.716	3.413	1.111117
48	2.77	19.417	45.875	15.515	1.101	1.111115
49	22.12	317.471	14.421	2.151	3.489	1.111116
50	7.19	112.272	21.474	8.929	1.131	1.111114
51	14.12	485.251	7.507	1.121	1.819	1.111119
52	55.54	789.945	8.521	1.749	7.789	1.111112
53	18.15	398.948	9.175	2.131	1.517	1.111111
54	14.64	492.717	14.421	1.441	1.439	1.111112
55	14.96	214.167	11.193	2.974	1.150	1.111116
56	12.73	455.551	4.696	1.212	7.948	1.111115
57	17.45	248.223	13.193	7.289	1.341	1.111119
58	14.98	213.167	11.193	2.193	7.499	1.111111
59	14.22	145.418	23.478	3.424	1.747	1.111115
60	15.19	214.455	19.751	2.511	1.416	1.111115
61	5.46	37.431	11.251	4.919	1.117	1.111114
62	11.97	111.112	9.016	1.111	1.019	1.111115
63	15.17	210.991	15.705	4.111	1.111	1.111119
64	11.16	188.544	15.525	4.568	1.413	1.111114
65	16.41	175.531	21.411	3.751	1.201	1.111115
66	51.63	742.781	4.696	1.576	1.693	1.111111
67	71.19	1311.111	4.696	1.453	1.757	1.111117
68	14.31	187.921	11.129	1.413	1.621	1.111119
69	11.79	194.818	11.017	1.121	1.025	1.111115
70	17.75	514.929	6.149	1.259	1.051	1.111119
71	12.73	455.551	11.129	1.559	1.441	1.111119
72	2.85	11.491	45.475	14.423	1.177	1.111111
73	1.16	15.411	91.743	15.275	1.115	1.111116

FIELD	NJ.	WJ./JPL	WJ2/J	WJ3/J	L/J	WJ2/J
74	14.10	541.731	11.129	1.473	1.473	1.111111
75	25.71	155.671	11.129	7.175	7.175	1.111111
76	1.17	47.499	11.129	1.165	1.165	1.111111

DATE 12/11/75
 13M SAMPLE # 4 JUL 7 4-457
 DISLOCATION RATE ONLY
 311 MK 1000 RING
 MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE
 AVERAGE DISLOCATION PER AREA=1.000000

MAG-PR1.3 INITS-412100 CAL. FACTOR-
 FRAME AREA- 3.515535333 14

1.375111 INITS/22

FIELD	NO.	NO./AREA	WZ90	WZ9H	L/A	WZ9A
1	54.22	1.112	893.957	843.273	1.112	1.1126993
2	374.11	1.111	128.955	133.129	1.111	1.1141137
3	27.31	1.111	2181.313	1644.737	1.111	1.1125117
4	5.22	1.111	9522.727	8522.727	1.111	1.014163
5	37.75	1.111	3753.111	4241.344	1.111	1.4101375
6	15.26	1.111	3212.759	3124.194	1.111	1.071501
7	44.78	1.111	1512.197	923.368	1.112	1.363451
8	17.11	1.114	417.419	375.111	1.114	1.338491
9	49.81	1.111	1442.318	1116.371	1.111	1.037511
10	132.53	1.114	551.471	371.553	1.114	1.117443
11	782.93	1.122	84.612	49.547	1.121	1.384571
12	714.14	1.121	115.508	9.741	1.124	1.410135
13	218.84	1.115	752.195	147.111	1.117	1.447727
14	1884.54	1.114	25.518	23.114	1.117	1.184710
15	211.41	1.114	319.188	99.543	1.114	1.711530
16	272.29	1.118	428.183	222.684	1.114	1.747198
17	7.43	1.111	7211.538	6494.429	1.117	1.777791
18	51.77	1.111	1143.293	699.627	1.112	1.623581
19	43.96	1.111	2212.143	1244.802	1.111	1.391635
20	911.11	1.126	75.202	51.373	1.126	1.084238
21	557.43	1.119	395.812	35.921	1.117	1.737344
22	211.52	1.117	349.513	71.394	1.114	1.439515
23	189.15	1.114	195.723	149.224	1.119	1.424535
24	28.51	1.111	2218.143	2138.343	1.111	1.544343
25	552.41	1.114	131.114	63.953	1.117	1.181511
26	6.41	1.111	4934.211	2218.133	1.111	1.941751
27	14.54	1.111	4174.187	1741.111	1.111	1.714175
28	5.42	1.111	251.111	4251.133	1.111	1.513913
29	13.55	1.111	1472.222	2757.153	1.111	1.840319
30	14.54	1.111	3232.759	2757.153	1.111	1.911339
31	1.11	1.111	555555555	555555555	1.111	55555555555
32	1.11	1.111	555555555	555555555	1.111	55555555555
33	1.11	1.111	555555555	555555555	1.111	55555555555
34	1.11	1.111	555555555	555555555	1.111	55555555555
35	1.11	1.111	555555555	555555555	1.111	55555555555
36	1.11	1.111	45875.127	45875.111	1.111	55555555555

LAST FIELD DELETED

	NO.	NO./AREA	WZ90	WZ9H	L/A	WZ9A
37	227.55	1.115	555555555	555555555	1.117	1.111111
38	181.11	1.111	555555555	555555555	1.111	1.111111
39	54.11	1.112	555555555	555555555	1.112	1.111117
40	1.11	1.111	555555555	555555555	1.111	55555555555
41	149.28	1.115	319.434	314.383	1.115	1.411372
42	2.11	1.111	31251.313	23437.513	1.111	1.474251
43	391.77	1.111	911.442	134.128	1.110	1.344732
44	214.92	1.117	241.385	191.917	1.117	1.617100
45	1181.13	1.114	62.567	54.116	1.129	1.713595
46	5.43	1.111	7111.518	1812.513	1.111	1.511391
47	124.92	1.114	475.844	371.553	1.114	1.142031
48	1495.75	1.143	41.344	34.953	1.143	1.270040
49	212.45	1.116	491.838	254.149	1.115	1.755339
50	52.95	1.117	195.723	142.139	1.110	1.327108
51	51.21	1.121	69.186	57.543	1.124	1.340345
52	7.13	1.117	555555555	555555555	1.117	55555555555
53	237.72	1.117	147.222	147.754	1.119	1.544732
54	148.19	1.113	125.839	112.483	1.113	1.111931
55	71.69	1.112	437.755	423.861	1.113	1.047230
56	1222.89	1.135	48.151	14.914	1.114	1.747749
57	1716.22	1.129	94.949	31.327	1.120	1.169592
58	1883.32	1.151	32.711	29.923	1.153	1.218872
59	552.81	1.115	131.487	11.413	1.110	1.318237
60	477.31	1.111	414.833	112.141	1.112	1.041534
61	929.92	1.126	141.977	54.513	1.120	1.742734
62	247.25	1.117	251.341	114.147	1.111	1.491373
63	1.41	1.111	18751.111	18751.111	1.111	1.125111
64	1.11	1.111	555555555	555555555	1.111	55555555555
65	1619.17	1.146	151.141	128.174	1.112	1.452744
66	387.15	1.111	119.271	118.182	1.113	1.140001
67	552.52	1.112	31.144	32.454	1.121	1.714230
68	331.52	1.119	191.854	145.124	1.111	1.504334
69	1.11	1.111	555555555	555555555	1.111	55555555555
70	1.11	1.111	555555555	555555555	1.111	55555555555
71	1612.45	1.146	45.988	41.957	1.140	1.402337
72	1374.41	1.139	39.381	11.042	1.142	1.170373
73	1975.91	1.155	11.748	10.111	1.154	1.011357
74	749.24	1.122	94.711	71.479	1.121	1.047433
	NO.	NO./AREA	WZ90	WZ9H	L/A	WZ9A
75	415.75	1.112	555555555	555555555	1.112	55555555555
76	512.15	1.115	555555555	555555555	1.115	55555555555
77	41.51	1.112	555555555	555555555	1.112	55555555555

DATE 12/11/77
 IN SAMPLE 77 JPL 4-457 5700
 THIN ONLY
 DIM OUT PUT DATA BEING DIVIDED BY 100
 .1 MM STEP SIZE
 MM MEASUREMENT ALONG THE CENTER LINE OF THE SAMPLE ONLY
 AVERAGE THIN AREA = 20.44X111

MAG-811.1 INITS-MM CAL. FACTOR- 1.001375 INITS/22
 FRAME AREA- 1.171113

FIELD NO.	NO./AREA	MM	MM	L/A	AREA
1	10.54	206.712	1.317	1.314	1.597
LAST FIELD DELETED					
2	17.15	142.539	12.111	5.515	1.114
3	1.11	1.111	55555555	55555555	1.111
4	4.89	69.511	24.795	9.848	1.112
5	14.56	217.333	14.423	5.571	1.111
6	13.52	178.122	17.345	6.278	1.111
7	13.11	185.729	24.795	9.848	1.174
8	24.47	348.154	7.212	2.114	1.172
9	27.81	395.552	9.175	2.374	1.493
10	35.31	419.549	5.278	1.533	1.737
11	49.61	735.611	4.571	1.323	1.845
12	13.85	197.331	11.417	3.773	1.331
13	1.13	1.111	55555555	55555555	1.135
14	2.29	32.515	24.795	9.848	1.177
15	1.11	1.111	55555555	55555555	1.111
16	3.11	3.111	55555555	55555555	1.111
17	3.11	3.111	55555555	55555555	1.111
18	3.11	3.111	55555555	55555555	1.111
19	3.11	3.111	55555555	55555555	1.111
20	2.19	34.735	31.111	12.111	1.196
21	24.76	191.532	8.868	2.193	1.514
22	33.19	472.174	6.148	1.531	1.734
23	28.69	418.764	7.813	1.311	1.833
24	76.93	1394.171	1.559	1.389	1.789
25	43.15	569.989	5.144	1.442	1.741
26	23.59	135.552	8.523	2.199	1.413
27	9.15	147.322	23.733	1.125	1.335
28	7.18	135.116	14.423	3.757	1.244
29	1.18	22.574	187.513	18.757	1.135
30	1.16	16.513	55555555	31.255	1.135
31	1.11	1.111	55555555	55555555	1.111
32	2.74	9.176	31.254	10.417	1.141
33	3.16	43.517	46.875	12.537	1.377
34	21.94	312.349	11.212	3.717	1.131
35	15.63	235.577	12.537	3.233	1.141

AVERAGE					
NO.	NO./AREA	MM	MM	L/A	AREA
10.54	206.712	55555555	55555555	1.274	55555555
16.99	241.639	55555555	55555555	1.274	55555555
2.87	41.844	55555555	55555555	1.145	55555555

36	11.1	150.525	11.193	2.541	1.131
37	9.12	112.511	13.438	3.167	1.111
38	8.17	119.112	13.438	1.924	1.131
39	1.75	25.111	15.975	5.920	1.134
40	15.94	155.323	17.754	1.111	1.131
41	1.11	1.111	55555555	55555555	1.111
42	15.95	214.333	21.438	1.173	1.131
43	16.48	211.111	21.438	4.571	1.131
44	9.47	137.511	13.438	1.111	1.131
45	1.11	1.111	55555555	55555555	1.111
46	1.11	1.111	55555555	55555555	1.111
47	1.11	1.111	55555555	55555555	1.111
48	1.11	1.111	55555555	55555555	1.111
49	1.11	1.111	55555555	55555555	1.111
50	2.11	25.514	31.111	15.125	1.172
51	5.47	92.414	31.111	1.538	1.296
52	5.49	78.112	31.257	7.513	1.144
53	7.17	111.517	21.833	1.464	1.241
54	55.71	792.124	7.212	1.111	1.814
55	76.72	1391.173	1.538	1.942	1.194
56	21.53	291.546	11.719	1.735	1.411
57	7.45	176.317	10.753	3.178	1.136
58	26.65	179.759	8.152	1.689	1.641
59	14.11	493.575	6.944	1.974	1.574
60	27.53	191.561	9.848	1.600	1.615
61	1.15	91.514	24.795	1.564	1.117
62	52.55	109.519	4.174	1.674	1.510
63	19.27	274.143	9.175	1.645	1.603
64	57.73	821.428	4.241	1.826	1.290
65	19.87	282.541	14.423	1.974	1.533
66	13.33	191.333	10.757	1.174	1.344
67	13.36	191.333	15.625	2.548	1.411
68	19.34	275.743	23.833	1.717	1.387
69	15.37	218.534	42.433	14.423	1.177
70	18.53	243.341	23.833	1.999	1.269

AVERAGE					
NO.	NO./AREA	MM	MM	L/A	AREA
15.79	224.985	55555555	55555555	1.320	55555555
17.95	245.115	55555555	55555555	1.328	55555555
2.15	31.515	55555555	55555555	1.139	55555555

DATE 12/1/75

TIME 7:40 PM

LOCATION 111111

31 111111

WEATHERING ALONG THE CENTER LINE OF THE AVES ONLY

AVERAGE WEATHERING AT AREA 111111

ORIGINAL PAGE IS
OF POOR QUALITY

MAG-111.1 111111-111111 111.1 111111
FRAME AREA- 1.1111111111

1.111111 111111

FIELD	NO.	NO. 111111	111111	111111	111111	111111
1	48.15	1.111	1339.294	1233.151	1.111	1.111111
2	171.08	1.111	111.447	159.435	1.111	1.111111
3	17.17	1.111	1264.022	114.927	1.111	1.111111
4	89.64	1.111	521.743	413.128	1.111	1.111111
5	17.77	1.111	554.734	475.880	1.111	1.111111
6	1.64	1.111	13414.667	13414.667	1.111	1.111111
7	119.11	1.111	114.819	157.104	1.111	1.111111
8	247.91	1.111	111.147	121.147	1.111	1.111111
9	513.11	1.111	85.752	44.124	1.111	1.111111
11	115.97	1.111	294.811	294.811	1.111	1.111111
11	167.52	1.111	247.141	221.118	1.111	1.111111
12	2194.14	1.111	15.482	25.152	1.111	1.111111
13	915.82	1.111	44.970	12.111	1.111	1.111111
14	1365.16	1.111	25.973	11.115	1.111	1.111111
15	1238.45	1.111	11.961	11.769	1.111	1.111111
16	943.27	1.111	44.111	15.992	1.111	1.111111
17	218.97	1.111	155.635	141.531	1.111	1.111111
18	324.29	1.111	115.174	98.177	1.111	1.111111
19	374.14	1.111	95.761	91.581	1.111	1.111111
20	617.15	1.111	48.125	14.752	1.111	1.111111
21	395.51	1.111	217.871	72.494	1.111	1.111111
22	2.57	1.111	11192.857	15625.187	1.111	1.111111
23	10.57	1.111	21417.533	18751.177	1.111	1.111111
24	195.14	1.111	217.174	171.115	1.111	1.111111
25	214.48	1.111	224.811	119.539	1.111	1.111111
26	1218.64	1.111	44.107	11.847	1.111	1.111111
27	197.17	1.111	178.124	141.141	1.111	1.111111
28	419.97	1.111	11.581	11.149	1.111	1.111111
29	111.65	1.111	116.723	224.449	1.111	1.111111
30	1.49	1.111	522.727	1812.111	1.111	1.111111
31	1.11	1.111	525555555	525555555	1.111	1.111111
32	1.11	1.111	525555555	525555555	1.111	1.111111
33	151.25	1.111	287.589	181.233	1.111	1.111111
34	942.73	1.111	52.157	44.688	1.111	1.111111
35	227.79	1.111	143.343	157.143	1.111	1.111111
36	258.74	1.111	256.148	185.147	1.111	1.111111

AVERAGE

NO.	NO. 111111	111111	111111	111111	111111
37	414.51	1.111	525555555	525555555	1.111
38	11.11	1.111	525555555	525555555	1.111
39	11.11	1.111	525555555	525555555	1.111

NO.	NO. 111111	111111	111111	111111	111111
37	11.11	1.111	152.444	199.167	1.111
38	84.14	1.111	421.474	444.111	1.111
39	579.51	1.111	68.481	14.117	1.111
40	231.62	1.111	151.723	159.419	1.111
41	111.92	1.111	155.171	159.158	1.111
42	249.71	1.111	154.519	151.511	1.111
43	171.72	1.111	175.551	112.152	1.111
44	1226.42	1.111	11.012	11.152	1.111
45	414.14	1.111	11.111	11.111	1.111
46	1111.11	1.111	44.174	11.111	1.111
47	176.14	1.111	214.531	117.797	1.111
48	181.11	1.111	97.555	14.151	1.111
49	527.79	1.111	79.855	74.111	1.111
50	78.17	1.111	489.291	444.111	1.111
51	15.64	1.111	7812.511	1211.519	1.111
52	295.11	1.111	159.419	141.977	1.111
53	165.69	1.111	124.172	116.127	1.111
54	111.11	1.111	114.111	111.111	1.111
55	111.11	1.111	11.111	11.111	1.111
56	118.82	1.111	111.111	111.111	1.111
57	191.65	1.111	111.111	111.111	1.111
58	15.11	1.111	111.111	111.111	1.111
59	8.12	1.111	4241.144	451.294	1.111
60	22.11	1.111	1147.115	1111.245	1.111
61	11.11	1.111	111.111	111.111	1.111
62	11.11	1.111	111.111	111.111	1.111
63	11.11	1.111	111.111	111.111	1.111
64	11.11	1.111	111.111	111.111	1.111
65	11.11	1.111	111.111	111.111	1.111
66	11.11	1.111	111.111	111.111	1.111
67	11.11	1.111	111.111	111.111	1.111
68	111.65	1.111	471.144	111.111	1.111
69	117.02	1.111	111.111	111.111	1.111
70	117.11	1.111	111.111	111.111	1.111

AVERAGE

NO.	NO. 111111	111111	111111	111111	111111
71	111.75	1.111	525555555	525555555	1.111
72	111.57	1.111	525555555	525555555	1.111